TO STUDY CLINICAL SPECTRUM AND CHARACTERIZATION OF INFECTIONS IN A MEDICAL INTENSIVE CARE UNIT

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Dedicated

to

my Family

&

Teachers

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Dr Harmandeep Kaur

LIST OF ABBREVIATIONS

AMK	Amikacin
AMC	Amoxicillin/clavulanic acid
AMP	Ampicillin
AST	Antibiotic susceptibility testing
ATCC	American Type Culture Collection
BYLC	Budding yeast like cells
CAD	Coronary artery disease
CAZ	Ceftazidime
CEP	Cephalothin
CDC	Centre for Disease Control
COPD	Chronic obstructive pulmonary disease
COT	Cotrimoxazole
CSL	Cefoperazone sulbactam
CTR	Ceftriaxone
CVA	Cerebrovascular accident
CXM	Cefixime
CAI	Community Acquired infections
DM	Diabetes mellitus
E. coli	*Escherichia coli*
ESBL	Extended spectrum ß lactamases
EPIC	Extended Prevalence of Infection in Intensive Care
ERT	Ertapenem
FOS	Fosfomycin
GHL	Gentamicin high level
GNB	Gram negative bacilli
HAI	Hospital Acquired Infections
ICU	Intensive care unit

IMP	Imipenem
LZ	Linezolid
MBL	Metallo ß lactamases
MDR	Multi drug resistant
MRSA	Methicillin resistant Staphylococcus aureus
MHA	Mueller Hinton agar
MICU	Medical intensive care unit
NCCLS	National Committee for Clinical LaboratoryStandards
NIT	Nitrofurantoin
NX	Norflox
OF	Ofloxacin
P	Penicillin
PDR	Pan drug resistant
RIF	Rifampicin
Spp.	Species
TEC	Teicoplanin
TET	Tetracycline
TIC	Ticarcillin
TZP	PiperacillinTazobactam
UTI	Urinary tract infection
VAN	Vancomycin
VRE	Vancomycin resistant *Enterococci*
XDR	Extensively drug resistant

ABSTRACT

Introduction: Long term stay in ICU leads to a variety of infections that increase the morbidity & mortality in critically ill patients. In the absence of precise microbiological data, treatment is started with broad spectrum antimicrobials, without discrimination as to the likely causative microorganisms resulting in ineffective therapy & increased antimicrobial resistance.

AIMS & OBJECTIVES OF THE STUDY

1) To study clinical profile, risk factors, outcome and characterization of infections in patients admitted in MICU.

MATERIALS AND METHODS

The study was a prospective study which was conducted over a period of one year in the department of Microbiology DMCH, Ludhiana. All patients admitted in medical ICU was included in study. The specimens received were cultured and antimicrobial susceptibility pattern was determined according to standard protocol. The detailed clinical profile and risk factors was noted in these patients to correlate the outcome. The data obtained was statistically analysed.

RESULTS

This prospective study was conducted in the Department of Microbiology, Dayanand Medical College and Hospital, Ludhiana. Over a period of one year (1st January 2020 to 31st December 2020), 1039 patients were admitted in medical ICU and infections were present in 298 patients infection rate of 28.6%. On the basis of clinical suspicion, various samples (respiratory, urine, blood, body fluid, soft tissue) were collected and they were processed as per standard protocol. Total 344 bacterial infections were characterized and 360 isolates were obtained. Out of the 360 isolates, 304 (84 %) were Gram negative isolates, 56 (16 %) were Gram positive isolates. These isolates were further processed and identified. The antibiogram of these isolates were studied.

CONCLUSION

As use of antibiotics has increased, it has led to increased antimicrobial resistance and knowledge of antimicrobial resistance pattern and result of culture reports provides guidance for the treatment thus improving outcome of the patient. Also proper precautions, hand hygiene while insertion of devices can help in preventing the spread of resistant organisms.

KEYWORDS

Infections, Medical Intensive Care Unit, Antimicrobial Susceptibility testing (AST)

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INTRODUCTION

Infections are one of the most important causes of mortality in the world, more in the low and lower-middle income countries.[1,2] The Global Burden of Diseases Study reported that although the mortality due to infections has decreased in the last 30 years, still they remain an important cause of death[2] and persists as the most important cause of disability.[1,3]

In India, also, infections remain an important cause of morbidity and mortality.[4,5]In the last century, the infectious diseases in India were mainly parasitic (malaria, leishmaniasis), viral (measles, poliomyelitis, and others) or bacterial and were mostly confined to the children and young age groups.[4] Bacterial infections were mild and easily treatable. Control of viral and parasitic diseases has led to serious bacterial infections in all age groups, especially in middle-aged and the elderly patients.[5,6]

Infections in ICUs are always crucial and need to be classified for any surveillance program. A time cutoff of 48 h has generally been accepted to distinguish between community-acquired and hospital -acquired infections from the practical point of view. However, it might not be always a “true” HAI if it develops after 48 h of ICU stay, since the causative microorganism may not belong to the ICU microbial ecology, rather imported by the patient as normal flora of his/her body. The “traditional” approach is challenged with the concept of “carrier state,” when genotypically similar strains grew repeatedly at any concentration from samples taken on admission and then afterward twice weekly from body sites such as throat or rectal swab taken for surveillance purposes to detect the potentially pathogenic microorganisms (PPMs).[7] On the other hand, clinical samples are collected from the superficial sites of suggestive infections and from the internal organs which are normally sterile such as lower respiratory tract, blood, and bladder while diagnosing local infections or systemic infections, respectively.[7] The HAI has been classified on the basis of carrier status and diagnostic cultures as follows:

Primary endogenous infection-

These infections usually occur early during the 1 week of ICU stay.[8] These infections are the most frequent form of infection in the ICUs, with an incidence between 50% and 85%. These may consist of both normal and abnormal potentially pathogenic microorganisms and may be imported in the ICUs during admission of the patient.

Secondary endogenous infections-

These usually occur after 1 week of ICU stay. These occur by aerobic MDR Gram-negative bacilli and Gram-positive cocci, especially MRSA and VRE. They accounts for one-third of all ICU infections.[8] These PPMs are first colonized in the oropharynx, and subsequently, in the stomach and the intestine, they can be prevented by the topical applications of nonabsorbable antimicrobials.

The prevalence of ICU-acquired infections are significantly higher in the developing countries than in industrialized countries, varying between 4.4% and 88.9%.[9]A recently published World Health Organization (WHO) review revealed that “In low- and middle-income countries the frequency of ICU-acquired infections are at least 2–3 higher than in high-income countries; device-associated infection densities are up to 13 times higher than in the USA”.[10]

The WHO estimates that the rate of hospital-acquired infections (HAIs) is 7%–12% among hospitalized patients all over the world and >1.4 million people had infection-related complications during their stay in the hospital at any time.[9,10]

Multiple factors are responsible like rapid urbanization, aging of the population, and emerging viral and bacterial infections -combined with the age-old upstream predisposing factors such as poverty, inequality, and illiteracy.[11]

Several risk factors contributing to these infections include poor health status, and placement of devices such as catheterization, endotracheal intubation, re-intubation, tracheostomy, placement of

nasogastric tube, mechanical ventilation, higher APACHE II score, and length of ICU stay among others.[12]

Intensive care units (ICUs) are an important source of infections, especially bacterial infections.[13] Studies in Europe and North America have reported that the primary (at the time of admission) as well as secondary (nosocomial, ventilator-associated, device-related, and others) infections are common in ICUs. The European Studies on Prevalence of Infections in ICU (EPIC-1 and EPIC-2) have reported a high prevalence of infections in a number of European countries.[14,15]High prevalence of infections, especially nosocomial, have also been reported from medical ICUs in the United States.[16] This is associated with higher age and APACHE-2 scores and high prevalence of comorbid conditions.[15] A recent European multicentric study proposed that the proportion of infected patients in intensive care units can be as high as 51%; most of these are health care associated.[10] Endotracheal intubation with mechanical ventilation increase the risk of nosocomial pneumonia by 6 to 21 times.[17] Central venous catheterization is responsible for 97% of all nosocomial blood stream infection.[18] Urinary catheterization is the most important risk factor for acquiring the nosocomial urinary tract infections. Nasotracheal intubation is the most important risk factor for acquisition of nosocomial sinusitis.[19] Other established risk factors include co-morbidities.

Among all ICU-related infections, respiratory tract infections and urinary tract infections (UTIs) are more frequent.[20] The common organisms contributing to these Hospital acquired infections include *Klebsiella, Acinetobacter, Escherichia coli, Pseudomonas*, and *Candida.*[21] In addition, high prevalence of drug resistance in these organisms is a major issue. They contribute to the higher morbidity and mortality of patients.[22] It is evident that HAIs in ICUs are an important reason of increased duration of hospital stay, cost of treatment, morbidity,

and mortality. Hence, an additional study on this topic assumes greater importance.

Infections are common in medical ICUs in India. Recent studies from different regions of the country have reported that both primary and secondary infections with gram-positive and gram-negative bacteria are prevalent.[23] Studies have also proved high prevalence of gram-negative bacterial infections such as with *Acinetobacter baumannii*, extended spectrum beta-lactamase, and metallo-beta-lactamase producing organisms (e.g *Escherichia coli*, *Klebsiella pneumoniae*) and drug-resistant gram-positive organisms like methicillin-resistant *Staphylococcus aureus*, *vancomycin*-resistant *Enterococci*, and others).[24]

The HAIs are mostly due to multidrug-resistant (MDR) hospital environmental flora, which demands the use of higher antibiotics for a longer duration. As a consequence, there is more chance of developing higher selection pressure and further development of resistance to reserved antibiotics, leading to increased length of stay for infected patients and increased chances of mortality.[25] Moreover, use of higher-end antibiotics such as carbapenems, colistin, tigecycline, vancomycin, linezolid, and daptomycin to combat Multidrug resistant HAIs increases the health-care cost immensely due to an increased need for isolation and the use of additional laboratory and diagnostic tools.

Effective control of infection in the hospital, especially in the intensive care unit (ICU) set up, is always challenging. It not only demands adequate awareness and constant vigilance among the health-care workers (HCWs) but also need a multidisciplinary approach to handle the management and control of infection in every patient.

AIMS & OBJECTIVES

- To study clinical profile, risk factors, outcome, characterization of infections in patients admitted in MICU.

REVIEW OF LITERATURE

Nosocomial infections are a major threat to the patients' safety in all health-care facility.[26] However, the prevalence is much higher in the Intensive Care Units (ICUs) than other areas of the hospital.[27,28] The prevention of ICU acquired infections demands knowledge of the infection rates and of the sources, the pathogens involved as well as the common risk factors responsible for infection. The incidence of nosocomial infections varies according to the setting, according to the type of hospital or ICU, the patient population and the precise definition and surveillance techniques used to identify a nosocomial infection.[29]

A large cohort multicentric international study conducted by Alberti C, Brun-Buisson C, et al. have reported at least one ICU acquired infection in 18.9% of patients, with an incidence ranging from 2.3% to 49.2% across the centers.[30] In a 1-day point prevalence study done by Vincent JL, Rello J, et al. involving 1265 ICU s from 76 countries (extended prevalence of infection in intensive care [EPIC II] study), 51% patients were found to have nosocomial infections. However, the rates of infections varies considerably according to the country, with Greece and Portugal having the highest and Switzerland and Germany and the Netherlands having the lowest infection rates.[31] Other studies have reported incidence rates between 9% and 37%, depending mainly upon the populations studied.[32] Crude infection rates may not be representative of the overall problem because they do not take into account the patient’s intrinsic risk of infection or extrinsic risks associated with exposure to medical interventions.[33] This difference in findings is not necessarily related to the better quality of care, since many other factors may be responsible including difference in the criteria for patient selection, the case mix, ICU type, length of stay, rate of device utilization and discharge criteria.[34] The patients from a single institution can present with different risk factors of infection in the context of differing case mix, severity of illness and utilization rates of invasive devices.[16]

In the EPIC II study conducted by Vincent JL, Rello J, the most common reported sites for ICU acquired infections were the lungs (64%), abdominal (19%), and blood stream (15%). Data from the United States National Nosocomial infections surveillance system reported that the nosocomial pneumonia accounted for 31% of all nosocomial infections followed by urinary tract infections and blood stream infections.[16] The site distribution of nosocomial infections in this study broadly conforms to the findings of earlier and larger studies mentioned above.

The precise pattern of causative organisms, whether bacterial or fungal, varies between countries and between ICUs according to patient case mix, site of infection, antibiotic protocols, infection control practice and local ecology and resistance patterns.[35] Although recent years had seen swings in the pathogen pattern toward Gram-positive bacterial infections[36] still, most studies reported that more than half of the nosocomial infections occurring in the ICU are due to Gram-negative bacteria[31,16]. In the study done by Sugata Dasgupta, Soumi Das and Avijit Hazra, the most commonly isolated organisms were Gram-negative *Enterobacteriaceae* followed closely by *Pseudomonas* species. The detection of *Candida* species in 15% of the isolates in the study conducted by Pittet and Wenzel[37] and Edgeworth *et al*.[38] who have also reported that fungal pathogens are also becoming increasingly common among patients with nosocomial bloodstream infections.

Intensive care unit acquired infection has been reported to be associated with increased length of ICU and hospital stays.[39] In a prospective observational study conducted by Sugata Dasgupta, Soumi Das and Avijit Hazra nosocomial pneumonia (both ventilator and non-ventilator associated) is the most frequently detected infection, followed by urinary tract and central venous catheter associated blood stream infections and gram negative *Enterobacteriaceae*, as a group, were the most frequently isolated pathogens, while *Pseudomonas aeruginosa* was the single most common causative organism. MDR pathogens are

common among late onset cases of VAP. Some recent reports have also identified similar rates of causes in patients with early versus late onset VAP. This may be related to the worldwide rise in MDR pathogens; it emphasizes that the local ICU ecology[40] is the most predominant risk factor for acquiring MDR pathogens, irrespective of the length of intubation. The challenge for the intensivist is to start an antimicrobial therapy that will be immediately effective while avoiding any overuse of extended-spectrum antimicrobials. New rapid diagnostic tests have been developed but their performances for VAP diagnosis remain need to be evaluated.[41,42]

Correa and Pittet have reported an additional cost of about $3.5 billion/year due to ICU acquired infections.[43] Crude mortality rates associated with nosocomial infection vary from 12% to 80%, depending upon the population studied and the definitions used.[35] Whereas some studies do reported increased mortality associated with nosocomial infections,[12] other studies, like those of Rello *et al*.[44] had not shown higher mortality, emphasizing the problems in defining cause-effect relationship in these individuals. In the study performed by Rosenthal et al.[45] crude mortality rate for patients with device associated infections ranged from 35.2% (for central venous catheter associated blood stream infection) to 44.9% (for VAP). A probable explanation for the lack of difference could be a variation in the baseline severity of illness mentioned before and described by Vincent.[35]

Although there is a plethora of studies detailing the risk factors for various types of nosocomial infections in various groups of patients, more commonly identified risk factors can be divided into four groups: (a) Those related to underlying health impairment; (b) those related to the acute disease process; (c) those related to use of invasive procedures and (d) those related to other treatment modalities. Diverse studies have described various features of underlying health impairment, like chronic lung disease,[46] immunocompromise, increased age,[32] malnutrition,[47]

etc, as independent risk factors for acquiring nosocomial infections. It has been reported in some studies[34,48] that the risk of developing nosocomial infections increased with high APACHE II score.

It has been reported in studies that the mortality associated with multiple organism bacteremia is 48% as against 25% in single organism bacteremia. In a study, age, simplified acute physiology score II score at onset of blood stream infection, colistin resistance and aminoglycoside were identified as independent predictors of *Klebsiella pneumoniae* infection in the ICU.[49] Another study was conducted in surgical ICU found admission APACHE II score, presence of peritonitis, pancreatitis, aminoglycoside use, and mechanical ventilation as independent risk factors for nosocomial infections.[50] A retrospective cohort study conducted by McCusker ME, Perisse AR in a mixed ICU found that the need for mechanical ventilation on ICU Day 1 and transfer to the ICU from another unit as independent predictors of ICU-attributable nosocomial infections.[51] No study has however, shown the direct association between a particular organism and a particular infection site on mortality.

More than 20 % of nosocomial infections are acquired in ICUs, and sepsis is a leading cause of death among patients, particularly those patients admitted to general and surgical ICUs.[52] In the Extended Prevalence of Infection in Intensive Care (EPIC II) study, the point prevalence of sepsis in ICU was 51 % in a cohort of 13,796 adult patients which were from 75 countries. Interestingly, 71 % of patients were receiving antibiotics on the day of the study.[53] Infections in ICU were an independent predictor of mortality, with an estimated OR of 1.51 ($p < .001$).[53] Data on the rate of new ICU-acquired infection is more difficult to obtain, partially because of non-homogeneous diagnostic criteria and different case-mixes. A seven-year-long survey conducted by the National Nosocomial Infection Surveillance System conducted on almost 500,000 patients admitted to 205 combined medical-surgical ICUs,

the rate of ICU-acquired infections were 6.1 %, with surgical patients accounting for 50 % of these.[16] Recently, retrospective French survey on patients over 80 years old showed a rate of ICU-acquired infection of 16.5 %, versus a rate of 13.9 % for younger patients.[54] In Italy, the 2006 surveillance program on infection in ICUs reported that ICU-acquired infection rate was 9.1 %, with MDR organisms accounting for more than 50 % of isolates and an associated ICU mortality rate close to 30 %.[55] In Spain, a rate of 9.3 % was recently found using data which was taken from 20 ICUs.[56] The rate of new ICU-acquired infections was 9.3 % which was reported by Malacarne and colleagues.[55] The difference in infection rates can be at least partially explained by the numbers of available beds in different countries. France, for instance, had an average of 38.5 ICU beds per 100,000 people.[52] Which may expose patients to the use of invasive devices that is invariably associated with ICU-infections.

In the past years, developed a worryingly high rate of resistant strains among Gram positive bacteria, especially *S. aureus* and *Enterococcus spp*. This led to intense efforts which were made to discover new antibiotics that are effective against these microorganisms. New molecules active against VRSA and VRE, such as telavancin, are now available, and infections due to these pathogens, even when severe, can also be treated.[57] On the contrary, little or no progress has been made recently in the treatment of multi-drug resistant Gram-negative infections, although they are currently a serious threat in many ICUs.[58] The lack of new antibiotics had led to older antimicrobial agents, such as colistin—which was formerly abandoned due to its toxicity profile—being considered. In many settings, this molecule is the only antibiotic effective on *Acinetobacter baumannii* or *Klebsiella pneumoniae.*[59]

Several studies show a variety of interactions between bacterial species and *Candida albicans*, which were demonstrated both in vitro and in animal models, and are mediated by mechanisms that are still not fully

understood.[60] For instance, farnesol, a sesquiterpene molecule which is secreted by *Candida albicans*, has been found to cause numerous antagonistic interactions between the fungus and various bacterial species. This molecule inhibits the production of virulence factors and alters quorum sensing of *Pseudomonas aeruginosa*, it also inhibits the viability of *Acinetobacter baumannii* in biofilms; and can also raise the susceptibility of *Escherichia coli* and *Staphylococcus aureus* to common antibacterial agents.[61] Moreover, emerging studies are now investigating the field of bacterial-fungal interactions as a possible source of new therapeutic agents. In a recent paper, King et al.[62] showed how a natural fungal product, *aspergillomarasmine A*., can restore the sensitivity to *carbapenems* in resistant strains of various pathogens by inhibiting NDM-1 and VIM-2—two clinically relevant *metallo-beta-lactamase.*

In general, ICU-acquired infections are responsible for 20–25% of all the hospital- acquired infections.[63] There may be variations in the incidence of ICU infections between centres, depending upon the characteristics of patients and ICUs. In a point-prevalence study conducted which included 1417 centres in 17 European countries, the infection rate in ICUs was reported to be 20.6%. The infection rates in ICUs in various other studies reported by authors namely were as follows: Legras et al. 21.6%, Appelgren et al. 34%, Aly et al. 10.6%, Ylipatosani et al. 23.9%, and Urli et al. 79%.[64] When we reviewed the rates of nosocomial infections reported in ICUs in our country, they are different from center to center. Meriç et al. reported the infection rate was 39.7%, Esen et al. (who reviewed the data of 56 ICUs in a 1-day point-prevelance study) as 48.7%, and Erbay et al. as 26%.[34]

The infections which are caused by multidrug-resistant gram negative bacilli that produce various β lactamase enzymes have been reported with an increasing frequency in the intensive care units and are associated with a significant morbidity and mortality.[65] The numerous β-lactamases enzymes are encoded either by the chromosomal genes or

by the transferable genes which are located on the plasmids or transposons.[66] Initially, these enzymes were mostly found in the *Klebsiella* species and in *Escherichia coli*[67] but now, these enzymes are produced by all members of *Enterobacteriaceae* and other Gram negative bacilli.[68]

The increase in the prevalence of the AmpC, MBL and the ESBL producing isolates may be indicative of the ominous trend of more and more isolates acquiring the resistance mechanisms, thus rendering the antimicrobials ineffective.

The high prevalence of these organisms in the ICUs emphasizes the need for an early detection of the β-lactamase producing organisms by simple screening methods, which can help in providing an appropriate antimicrobial therapy and in avoiding the development as well as dissemination of these multidrug resistant strains. The need of the hour is that every health care institution must develop its own antimicrobial stewardship program which is based on the local epidemiological data and international guidelines, to optimize the antimicrobial use among the hospitalized patients, to improve the patient outcomes, also to ensure a cost-effective therapy and to reduce the adverse consequences of the antimicrobial use.[69] Preventive measures like a continuous surveillance of the ICUs and also a strict implementation of infection control practices can go a long way in containing the menace of drug resistance in the health care settings.

In Europe, the prevalence of ESBL production among isolates of *Enterobacteriaceae* greatly varies from country to country. In Netherlands, a survey of 11 hospital laboratories showed that <1% of *E.coli* and *K. pneumoniae* strains possess an ESBL.[70] However, in France, 40% of *K. pneumoniae* isolates were found to be ceftazidime resistant.[71] Across Europe, the incidence of ceftazidime resistance among *K. pneumoniae* strains was 20% for non-ICU isolates whereas 42% for isolates from patients in the ICU. In Japan, the percentage of β-

lactam resistance due to ESBL production in *E. coli* and *K pneumoniae* remained very low. In a recent survey of 196 institutions across the country, <0.1% of *E. coli* and 0.3% of *Klebsiella pneumoniae* strains possesses an ESBL.[72]

The increased prevalence of *Enterobacteriaceae* producing ESBLs creates a great need for laboratory testing methods which will accurately identify the presence of these enzymes in clinical isolates. Although most of the ESBLs confer resistance to one or more of the oxyimino-β-lactam antibiotics, the β-lactamase does not always increase the MICs to high enough levels to be called resistant by the National Committee for Clinical Laboratory Standards (NCCLS) interpretive guidelines.[73,74] The sensitivity and specificity of a susceptibility test to detect ESBLs vary with the cephalosporin to be tested. A number of investigators have suggested that either dilution tests or disk diffusion susceptibility tests performed with cefpodoxime detected more ESBLs than with other cephalosporins such as ceftazidime, cefotaxime and ceftriaxone.[75,76]

In a recent survey conducted through the World Health Organization, 5.4% of laboratories using disk diffusion tests found that an ESBL-producing challenge strain to be susceptible to all cephalosporins.[77] In that study conducted by Tenover et al. reported that only 2 of the 130 laboratories surveyed specifically reported the isolate as an ESBL producer.[77]

In a point prevalence survey, which was conducted by Azzam and Dramaix in Lebanon, the HAI prevalence rate was 6.8%.[78] The ICUs had the highest rates of HAIs, followed by the medical wards. Studies from the developed countries have shown the majority of HAIs occur in the ICUs.[79,80] This is to be expected because ICU patients are more likely to be critically ill and to endure multiple invasive procedures and indwelling lines. In a prospective survey conducted over a six-month period from a tertiary care hospital in Abu Dhabi, three areas were included, the ICU, male orthopedic ward and general surgery ward, and the prevalence of

hospital acquired infections were highest among the ICU patients, 29.1%, followed by patients of the male orthopedic ward and general surgery ward, 6.5% and 5.7%, respectively.[81]

Memish et al. reported a high VAP prevalence rate among the adult ICU patients between 1996 and 1997 as 16.8/1000 ventilator days. A second prospective study conducted over a two-year period among pediatric ICU (PICU) patients revealed that a lower VAP rate of 8.87/1000 ventilator days, but almost double the NNIS PICU VAP rate of 4.9/1000 ventilator days.[79]

Gram-negative organisms were responsible for most HAIs. A study published from Jeddah in 2001 have shown the prevalence of MRSA in two tertiary care hospitals was 33%.[82] Most of these isolates were from the ICU followed by the general medical wards. The emergence of MRSA as a major nosocomial pathogen has been recognized worldwide, and in major cities in the USA, MRSA in hospitals has increased from less than 3% to over 30% within the past three decades.[83] More alarming though, is the documented rise in the number of community acquired infections with MRSA and the major economic impact it has on the medical care system. Bukharie et al. from the Eastern province of Saudi Arabia, have shown a 15-fold increase in the number of MRSA related CAIs over a three-year period.[84]

MATERIALS AND METHODS

The study was prospective study conducted in the department of Microbiology, DMCH Ludhiana for a period of one year from 1st January 2020 to 31st December 2020. All the patients admitted in medical ICU was included in the study and was monitored for any infection.

SOURCE OF DATA-

Patients admitted in MICU.

Inclusion Criteria

All patients admitted in MICU having signs and symptoms of infections

Exclusion Criteria

Patients admitted in other ICU's.

METHOD OF COLLECTION OF DATA-

Patient details which include Name, age, sex, MRD number, date of admission.

- Risk factors (old age/comorbities/malnutrition and immunocompromised state/reintubation etc), date of insertion/removal/duration of indwelling devices
- Reason for ICU admission
- Apache 2 score
- Source of admission
- Empirical antibiotics
- General investigations
- Provisional diagnosis
- Outcome was recorded in a preformed proforma.
- Characterization of isolates obtained was done.

SAMPLE COLLECTION-

- **Blood sample** – Under all aseptic conditions, 10-20 ml of blood was withdrawn from antecubital vein with a disposable syringe and was inoculated directly into commercially prepared BACTEC 9240 or BacT/Alert culture bottles.

- **Body fluids**-Under all aseptic conditions body fluid samples was collected in sterile universal container.
- CSF sample was collected aseptically by lumbar puncture into sterile glass vials.
- **Respiratory samples**-
- ET secretions sample- It was collected by introducing a catheter through the larynx into the trachea. If an endotracheal tube is in place or tracheostomy has been done, the tracheal secretions was aspirated in a sterile screw capped container.
- BAL sample-It was collected by injecting 30 to 50 ml of physiologic saline through a fibroptic bronchoscope. The saline was aspirated & sent for smear preparation and culture.
- **Urine** -Under all aseptic conditions urine samples from catheterized patients were collected with a disposable syringe from the urine port.
- **Pus/ Wound swab/Tissue** - Under all aseptic conditions these samples were collected in sterile universal container.

SAMPLE PROCESSING- The samples received in Microbiology lab were processed as per standard protocol.

DIRECT EXAMINATION-

- Gram staining was performed directly from the sample.
- KOH mount- 10-20% KOH was used for identification of fungal elements.
- For CSF samples-wet mount preparation, India ink preparation, bacterial antigen and Cryptococcal antigen.
- ZN staining – smear was prepared for detection of acid fast bacilli.

CULTURE-

- Blood and body fluid specimens were processed in the BACTEC 9240 or BacT/Alert microbial detection system. Blood culture bottles were loaded in the instrument and incubated for a maximum period of 7 days or bottle indicate positive by the system and time to positivity

was noted. Smears were prepared from positive blood culture bottles and Gram staining was done. The positive bottles were subcultured on blood agar and MacConkey agar plates.

- Urine, respiratory samples, pus, wound swabs etc were cultured on blood and MacConkey agar and incubated at 37*C for 24-48 hrs.
- **Composition of the media-**
- **Blood Agar**
- The medium was prepared by adding sterile sheep blood (5-10 %) to the sterile nutrient agar that has been melted and cooled to 50 degree Celsius. Double layered blood agar was prepared. A thin layer of melted nutrient agar, about 7 ml for 9 cm petri dish, was poured and allowed to set. Then thin layer of 5 % blood agar was poured on the top of the first layer.
- **MacConkey's Agar**-
- Composition:
- Peptone20g
- Sodium taurocholate 5gWater1L
- Agar20g
- Neutral red solution, 2% in 50% ethanol 3.5mlLactose, 10% aqueous solution100ml

Preparation- The peptone and taurocholate were dissolved in water by heating. To this agar was added and dissolved in the steamer or autoclave.PH was adjusted to 7.5. Lactose and neutral red were added and mixed. Then was autoclaved with free steam for 1 hour and then at 115 degree for 15 min.

AUTOMATED BLOOD CULTURE SYSTEMS-

Bac T/ Alert

Principle-

The Bac T/ Alert blood culture system utilizes a calorimetric sensor and reflected light to monitor the presence and production of carbon dioxide

(CO2) dissolved in the culture medium. If microorganisms are present in the test sample, CO2 is produced as the organisms metabolize the substrates in the culture medium. When growth of microorganism produces CO2, the color of the gas-permeable sensor installed in the bottom of each culture bottle changes from blue-green to yellow. The lighter color result is an increase of reflectance units monitored by the system.

BACTEC 9240 BLOOD CULTURE SYSTEM-

Principle-

Bactec 9240 blood culture system uses fluorescent sensor to monitor the presence and production of CO2 that is dissolved in the culture medium. If microorganisms are present in the test sample, CO2 is produced as the organisms metabolize the substrates in the culture medium. When growth of microorganism produces CO2, its sensor emit a fluorescent light that passes an emission filter on the way to a light sensitive diode.

Processing of positive blood culture bottles-

Smears were prepared from positive blood culture bottles and examined after Gram's staining. Simultaneously all the positive bottles were subcultured on Blood Agar and MacConkey's agar and the plates were then incubated at 37 degree Celsius for 18-24 hrs.

IDENTIFICATION-

Growth of organisms were identified by the colony characteristics, Gram's staining, motility and various biochemical reactions like catalase, coagulase, oxidase, nitrate reduction, indole, methyl red, Voges Proskauer, citrate utilization, urease test, liquid sugars, amino sugars.

MYCOBACTERIAL CULTURE- After decontamination/ centrifugation/ homogenization, sample was cultured on LJ medium for 8 weeks. Growth obtained was used to make ZN smear to confirm acid fast bacilli.

FUNGAL CULTURE- Samples were cultured on 2 sets of Sabourauds dextrose agar (with and without cycloheximide) and incubated at 25°C and

37° C for 21 days. Identification of the isolates was done by Gram staining, germ tube testing and lactophenol cotton blue mount.

ANTIMICROBIAL SUSCEPTIBILITY TESTING –

It was done by Vitek-2 panel. Identification of Gram positive and Gram negative was done by using AST-GP628 card and AST-GN280/281 cards respectively. For Gram positive organisms drugs used were benzylpenicillin, oxacillin, gentamicin, ciprofloxacin, levofloxacin, erythromycin, clindamycin, daptomycin, linezolid and vancomycin. For Gram negative organisms, AST-GN280 card test and AST-GN281 contained antibiotics amikacin, gentamicin, ciprofloxacin, ampicillin, cefepime, levofloxacin, ceftriaxone, cefuroxime, ceftazidime, amoxicillin / clavulanic acid, cefoperazone/sulbactam, piperacillin/tazobactm, ertapenem, imipenem, meropenem, doripenem trimethoprim-sulfamethoxazole, ticarcillin/calvulanic acid, aztreonam, minocycline colistin and tigecycline. For urinary isolates, norfloxacin instead of ciprofloxacin and nitrofurantoin were used.

Yeast identification was done by YST-007 card which contained amphotericin B, fluconazole, flucytosine, voriconazole and caspofungin.

Quality control

ATCC strains of *Escherichia coli* 25922, *Pseudomonas aeruginosa* 27853, *Staphylococcus aureus* 25923 were used as quality controls.

TABLE 1: MUELLER HINTON AGAR PREPARATION

Beef infusion	300ml
Casein hydrosylate	17.5 g
Starch	1.5 g
Agar	10 g
Distilled water	1 litre

Preparation-Starch was emulsified in a small amount of cold water. This was poured into beef infusion. To this casein hydrosylate and agar was added. The volume was made upto 1 litre with distilled water. Constituents

were dissolved by heating at 100 degree Celsius with agitation, PH was adjusted to 7.4. It was autoclaved at 121 degree celsius for 20 min and then poured in plates.

Screening for ESBL, AmpC and carbapenemases (MBL/KPC) production in Gram negative bacteria.

The Mueller Hinton Agar (MHA) plate was inoculated using a swab that has been submerged in a bacterial suspension (Standardized to match the turbidity of 0.5 McFarland) by lawn culture method. It was swabbed by rotating it three times at angle of 60° to ensure an even and complete distribution of the inoculums over the entire plate. Within ten minutes of inoculation the antimicrobial discs were applied. The antimicrobial discussed for screening procedure were cefotaxime and ceftazidime (for ESBLs, cefoxitin (for AmpC-ß-lactamase) and ertapenem (for carbapenemase). These discs were applied on the plates and then the plates were incubated at 35-37°C for 24 hours as per CLSI Guidelines. The plates were examined to confirm that a confluent lawn of good growth has been obtained. Then zones of inhibition were measured and compared with the Performance.

TABLE 2: STANDARDS OF ANTIMICROBIAL DISC SUSCEPTIBILITY TEST PROVIDED BY CLSI.[85]

ENZYME	ANTIMICROBIAL DISC	ZONE SIZE INDICATINGRESISTANCE
ESBLs	Ceftazidime Cefotaxime	≤22cm ≤26mm
AmpC	Cefoxitin	<18mm
Carbapenemases (MBL/KPC)	Ertapenem (10 µg) Meropenem (10 µg)	19-21mm 16-21mm

Interpretation: If the zone size is as mentioned above, the organism was labeled as probable ESBL/AmpC or carbapenemase (MBL/KPC) producer and subjected to confirmatory tests.

Confirmatory Tests

ESBL-Double Disc Diffusion Test (DDDT)

The lawn culture of test organism was done on MHA. The discs of ceftazidime alone (30µg) and in combination with clavulanic acid (10µg) or cefotaxime (30µg) alone and in combination with clavulanic acid (10µg) were applied on the plate. The discs were placed in such a way that the center to center distance between the discs was minimum 30mm. The MHA plate were incubated at 35°C for 24 hours as per CLSI guidelines.[85]

Interpretation-An expansion of zone of inhibition ≥5 mm around the combination disc was considered a positive result.

AmpC- AmpC Disc Test[86]

A lawn culture of *E coli* ATCC 25922 was prepared on a MHA plate and a cefoxitin disc (30µg) will be placed on the plate. AmpC disc (filter paper disc containing Tris-EDTA) was moistened with 20 µg of sterile saline and inoculated with colonies of test organism. This disc was then placed beside the cefoxitin disc (almost touching) with the inoculated side facing downwards. The MHA plate was incubated at 35°C for 24 hours.

Interpretations- If there was flattening or indentation of cefoxitin inhibition zone, it was considered as an AmpC producer.

Carbapenemases [Metallo-ß-lactamase (MBL)/*Klebsiella pneumonia* carbapenemases (KPC)] – Modified Hodge Test (MHT)[85,87]

A 0.5 McFarland standard suspension of *E. coli* ATCC 25922 was prepared in saline and was diluted 1:10 in saline. A lawn culture was prepared on MHA plate as for routine disc diffusion method. The plates were allowed to dry for 3-10 minutes. One 10 µg ertapenem disc was placed at the center of the plate. Then using 10 µg loop, 3 to 5 colonies of test organism ware picked and inoculated in a straight line out from the edge of the disc. The streak was 20-25 mm in length. The plate was

incubated at 35-37°C for 24hrs.

Interpretation-Enhanced growth around the test organism at the intersection of the streak and the zone of inhibition was considered positive for carbapenemases (MBL/KPC).

MDR/XDR/PDR Characterization:

There are various definitions for multidrug-resistant (MDR), extensively drug-resistant (XDR) and pandrug-resistant (PDR) bacteria are being used in the medical literature to characterize the different patterns of resistance found in healthcare-associated, antimicrobial-resistant bacteria. MDR was defined as acquired non-susceptibility to at least one agent in three or more antimicrobial categories, XDR was defined as non-susceptibility to at least one agent in all but two or fewer antimicrobial categories (i.e. bacterial isolates remain susceptible to only one or two categories) and PDR was defined as non-susceptibility to all agents in all antimicrobial categories. There recent increase in drug-resistant micro-organisms has made the management of hospital-acquired infections more difficult and also result in the poor outcome of the patient.

Vancomycin resistance in *Enterococci*[85]

Vancomycin resistance in the *Enterococcal* isolates was determined by the VITEK 2 system and VRE was manually confirmed by preparing agar plates containing 6µg of vancomycin per ml with Brain heart infusion media. A 0.5 McFarland suspension of the *Enterococcus* isolate was prepared. 1µl of the suspension was spotted on the surface of the agar. The plates were then incubated for 18-24 hours at 35°C. Presence of growth indicated resistance to vancomycin.

Test for detection of Methicillin resistant *S.aureus* (MRSA) and Methicillin resistant Coagulase negative *Staphylococcus* (MRCONS)[85]

Screening for MRSA and MRCONS was done by the VITEK 2 system. Cefoxitin disc diffusion was performed on *S. aureus* isolates using a 30µg disc. A 0.5 McFarland standard suspension of the isolate was prepared

and lawn culture was done on MHA plate. Cefoxitin disc was applied and plates were incubated at 37°C for 24 hours. Zone diameters were measured and interpreted as follows:

TABLE 3: CONFIRMATORY TEST FOR MRSA

	Resistant	**Sensitive (mm or more)**
S.aureus	21	22
CONS	24	25

Interpretation- Organism was labeled as MRSA and MRCONS on the basis of zone size indicated above.

Infections were categorized into Respiratory, Urinary, Blood stream, Abdominal, Soft tissue infections etc. and infection rate was calculated depending upon the number of patients who developed infection.

Depending upon the number of days of indwelling devices, device associated infection rate (VAP, CLABSI, CAUTI) was calculated. Data obtained from the study was put to appropriate statistical analysis. P value <0.05 was considered significant.

OBSERVATIONS AND RESULTS

This prospective study was conducted in the Department of Microbiology, Dayanand Medical College and Hospital, Ludhiana. Over a period of one year (1st January 2020 to 31st December 2020), 1039 patients were admitted in medical ICU and infections were present in 298 patients with a infection rate of 28.6%. Out of 298 patients, 2 patients had pulmonary tuberculosis, 13 patients had fungal infection (7 patients had both fungal and bacterial infection and 6 patients had only fungal infection) and 290 patients had only bacterial infection. On the basis of clinical suspicion, various samples (respiratory, urine, blood, body fluid, soft tissue) were collected and they were processed as per standard protocol. Total 344 bacterial infections were characterized and360isolates were obtained. Out of the 360 isolates, 304 (84%) were Gram negative isolates, 56 (16%) were Gram positive isolates. These isolates were further processed and identified. The antibiogram of these isolates were studied. Following observations and results were made from the study. All the results are depicted in form of charts and graphs and statistical analysis was done.

TABLE 4: AGE WISE DISTRIBUTION OF ADMITTED PATIENTS (n=1039)

Age	Number of cases	Percentage %
< 20	30	3.0
21-30	100	9.6
31-40	96	9.2
41-50	149	14.3
51-60	209	20.1
61-70	251	24.2
71-80	149	14.3
81-90	52	5.0
91-100	3	0.3
Total	1039	100

Maximum admitted patients were from the age group of 61-70 years followed by 51-60 years. Mean age of admitted patients= 55.1, Standard deviation =17.7

FIGURE 1: AGE WISE DISTRIBUTION OF ADMITTED PATIENTS (n=1039)

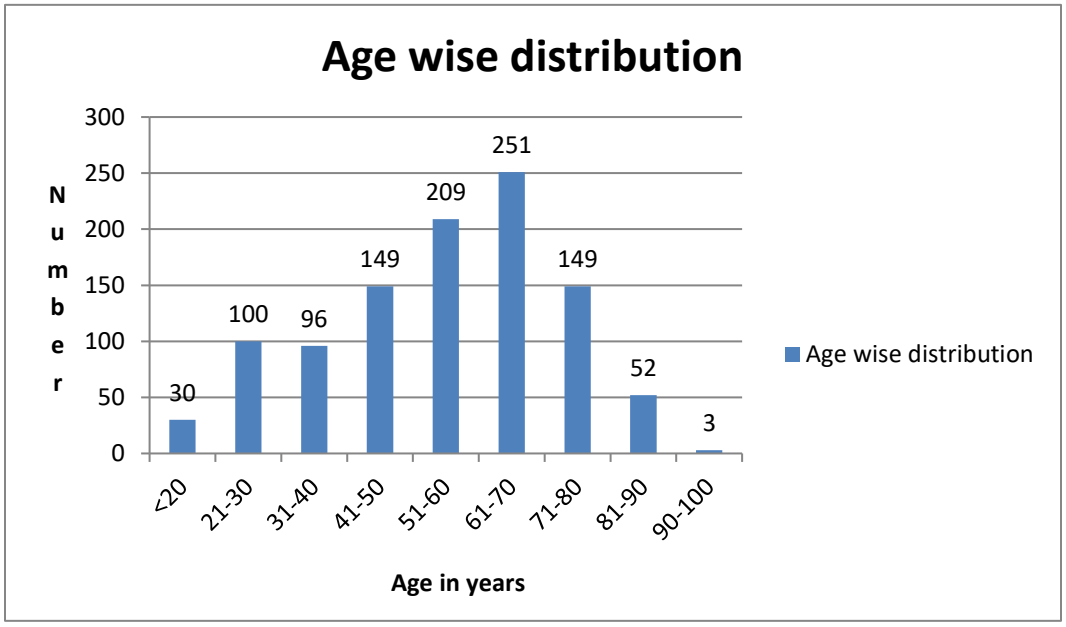


TABLE 5: SEX WISE DISTRIBUTION OF ADMITTED PATIENTS (n=1039)

Sex	Number of cases	Percentage %
M	645	62
F	394	38
Total	1039	100

Majority of patients were males (62 %) as compared to females (38 %)

FIGURE 2: SEX WISE DISTRIBUTION OF ADMITTED PATIENTS (n=1039)

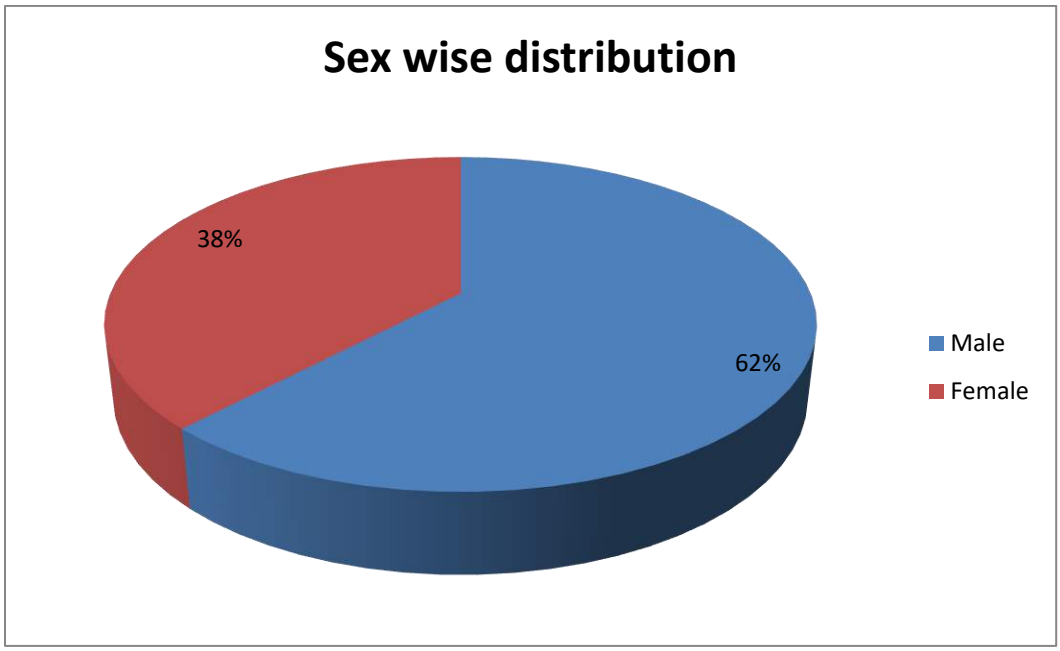


TABLE 6: MONTH WISEDISTRIBUTION OF PATIENTS WITH INFECTIONS

Month	Patients admitted (n)	Patients with infections (n)	Infection rate (%)
January	94	32	34.0
February	76	28	36.8
March	114	42	36.8
April	116	27	23.0
May	83	21	25.3
June	94	34	36.1
July	77	17	22.0
August	72	20	27.7
September	84	13	15.4
October	85	24	28.2
November	78	25	32.0
December	66	15	22.7
Total	1039	298	28.6

In 1039 admitted patients, infections were present in 298 patients with a infection rate of 28.6%. Infection rate was maximum in the month of February (36.8 %) followed by infection rate in June (36.1%)

FIGURE 3: MONTH WISE DISTRIBUTION OF PATIENTS WITH INFECTIONS

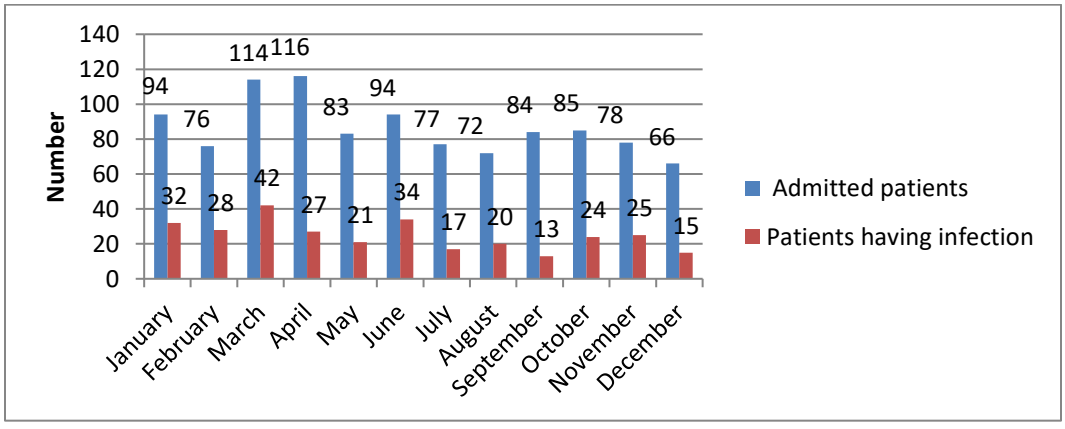


TABLE 7: AGE WISE DISTRIBUTION OF PATIENTS WITH INFECTIONS (n=298)

Age	Number of patients	Percentage%
< 20	6	2.0
21-30	22	7.4
31-40	30	10.1
41-50	45	15.1
51-60	61	20.5
61-70	77	25.8
71-80	44	14.8
81-90	13	4.4
Total	298	100

Majority of patients were in the age group of 61-70 years followed by 51-60 years and mean was 55.9, standard deviation was 16.6.

FIGURE 4: AGE WISE DISTRIBUTION OF PATIENTS WITH INFECTIONS (n=298)

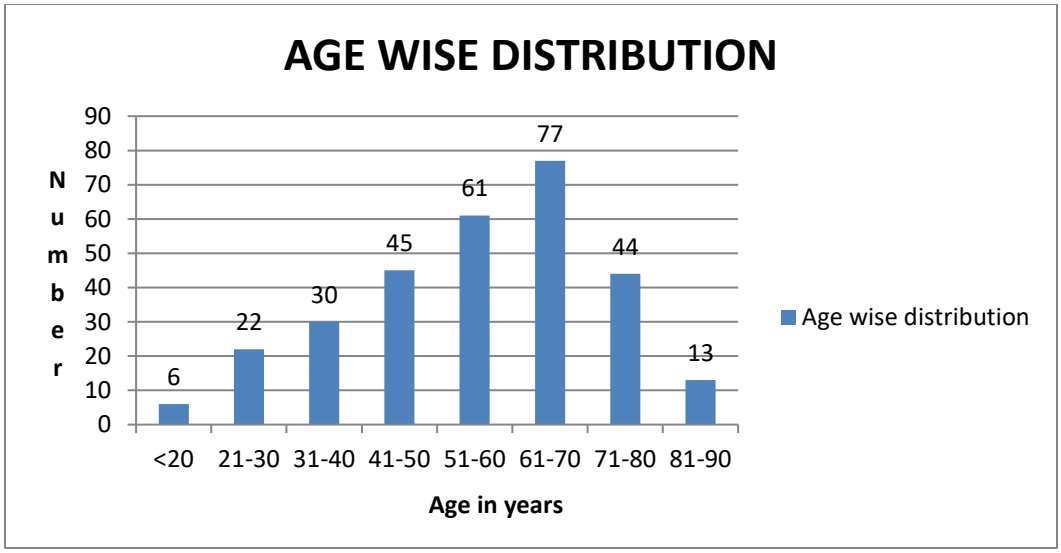


TABLE 8: SEX WISE DISTRIBUTION OF PATIENTS WITH INFECTIONS (n=298)

Sex	Number of cases (n)	Percentage %
Male	188	63
Female	110	37
Total	298	100

Majority of patients were males (63 %) as compared to females (37 %)

FIGURE 5: SEX WISE DISTRIBUTION OF PATIENTS WITH INFECTIONS (n =298)

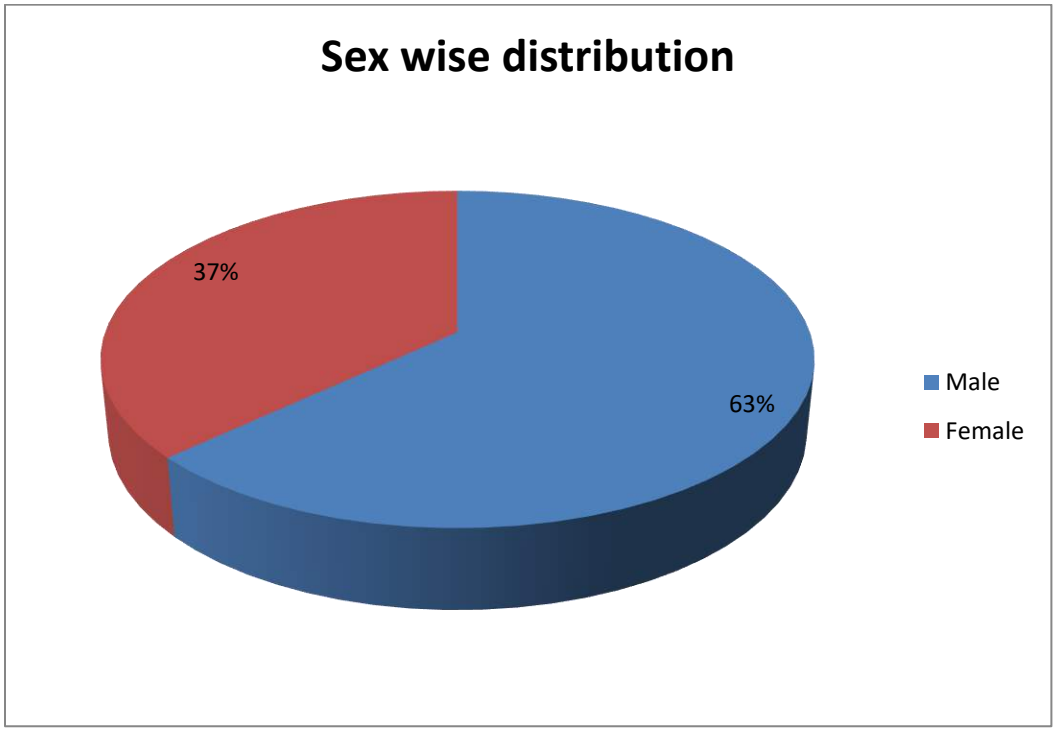


TABLE 9: COMORBIDITIES OF PATIENTS WITH INFECTIONS(n=298)

Comorbidities	Number of cases	Percentage %
Diabetes mellitus	76	25.5
Hypertension	32	10.7
Chronic kidney disease	31	10.4
Pulmonary	23	7.7
Hypertension, Diabetes mellitus	14	4.7
Cardiovascular	13	4.4
No comorbid illness	109	36.6
Total	298	100

Out of 298 patients,189 were having comorbidities and no comorbidity was observed in 36.6 % cases. Most of the patients were diabetic (25.5%) followed by hypertension (10.7 %).

FIGURE 6: COMORBIDITIES OF PATIENTS WITH INFECTIONS (n=298)

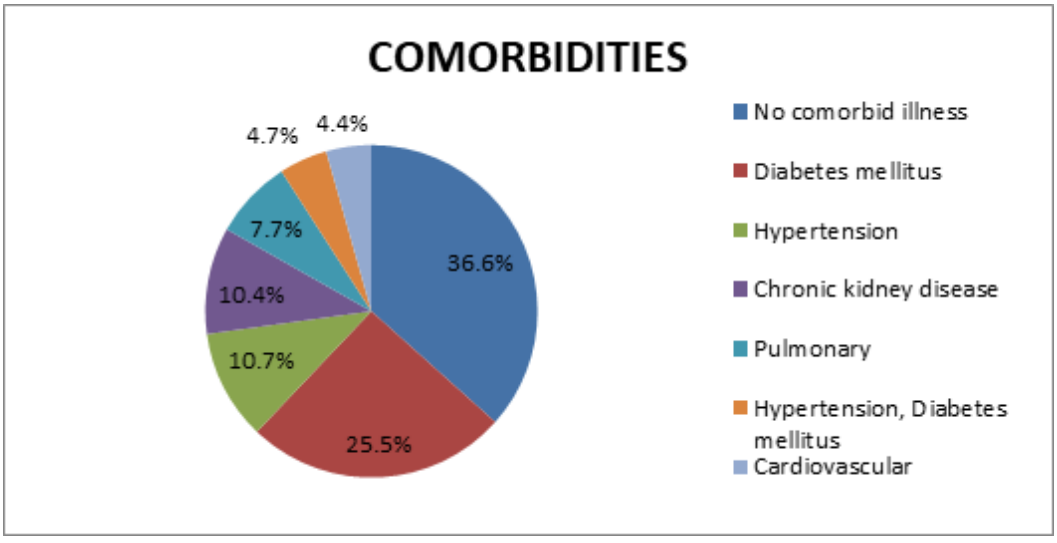


TABLE 10: RISK FACTORS OF PATIENTS WITH INFECTIONS (n=298)

Risk factors	Number of cases	Percentage %
Sepsis	75	24.8
Elderly (>70 years)	57	19.5
Immunocompromised	49	16.4
Obesity	36	12.1
Malnutrition	36	12.1
Immobilisation	15	5.0
Smoking	11	3.7
Chronic artery disease	13	4.4
Reintubation	2	0.7
Device related	4	1.3
Total	298	100

Most common risk factor was sepsis present in 24.8 % of cases

FIGURE 7: RISK FACTORS OF PATIENTS WITH INFECTIONS (n=298)

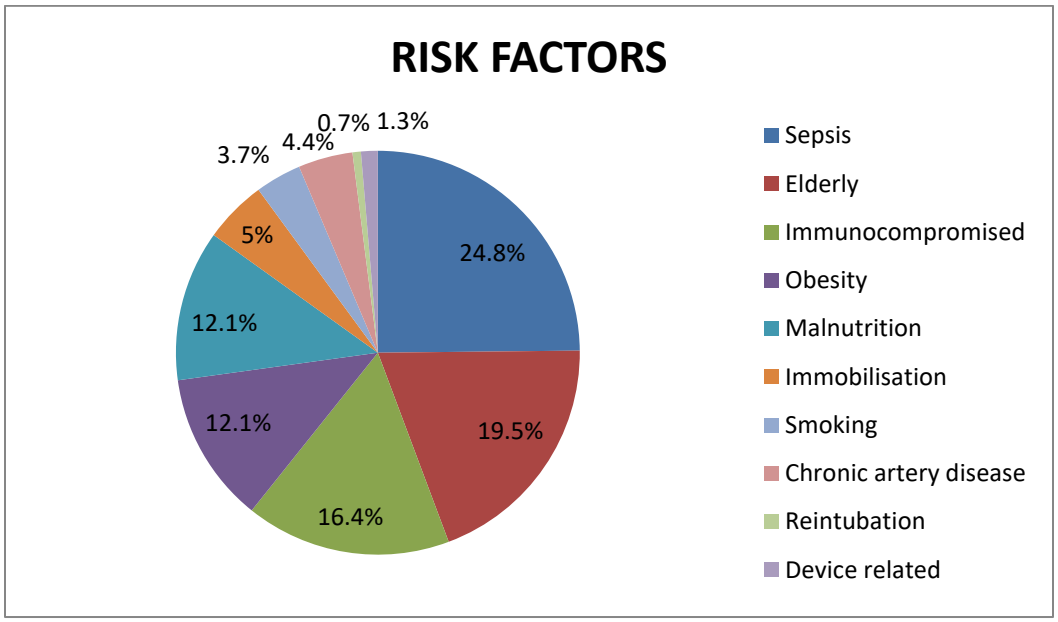
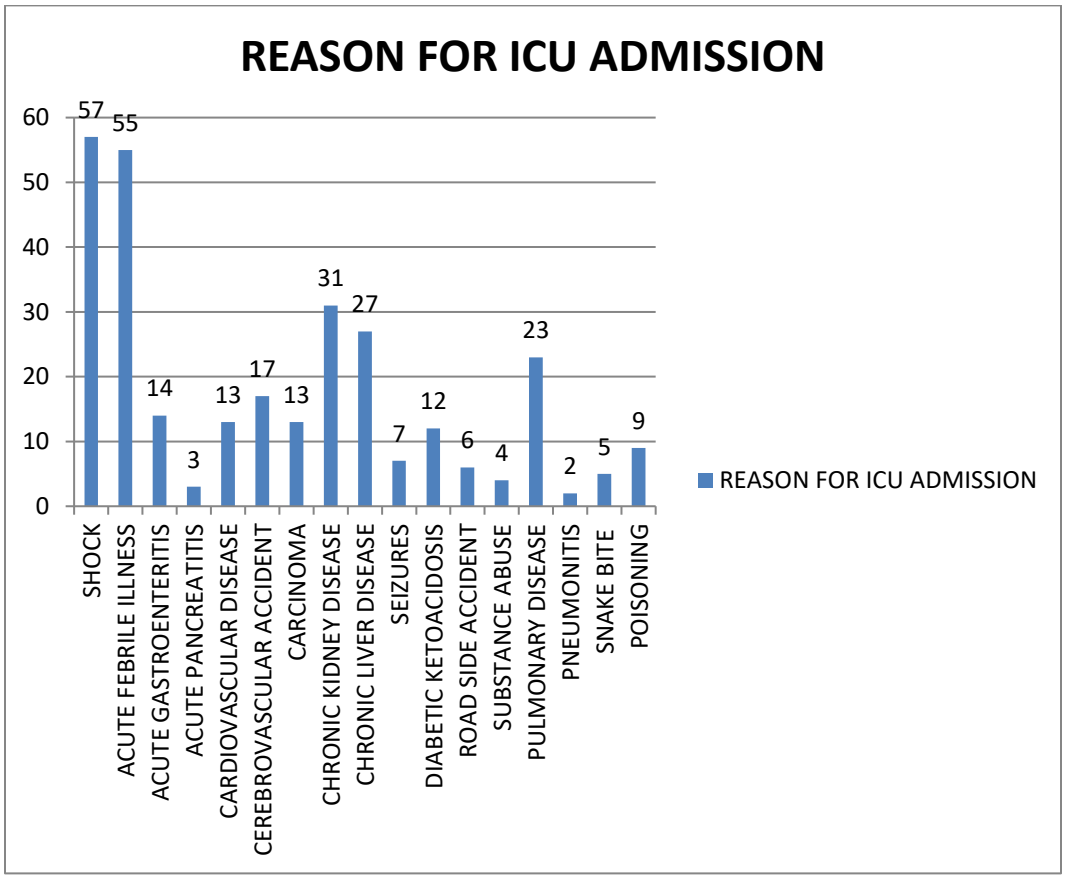
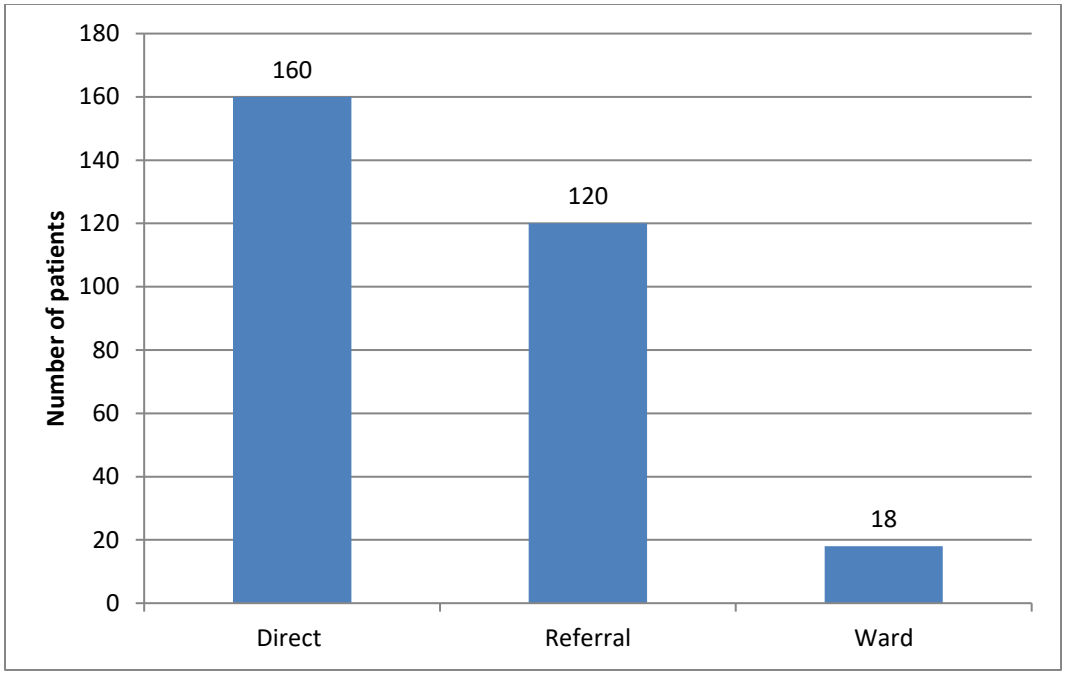


FIGURE 8: REASON FOR ICU ADMISSION OF THE PATIENTS WITH INFECTION (n=298)



Most common reason for admission was shock, Acute febrile illness and Chronic kidney disease.

FIGURE 9: SOURCE OF ICU ADMISSION (n=298)

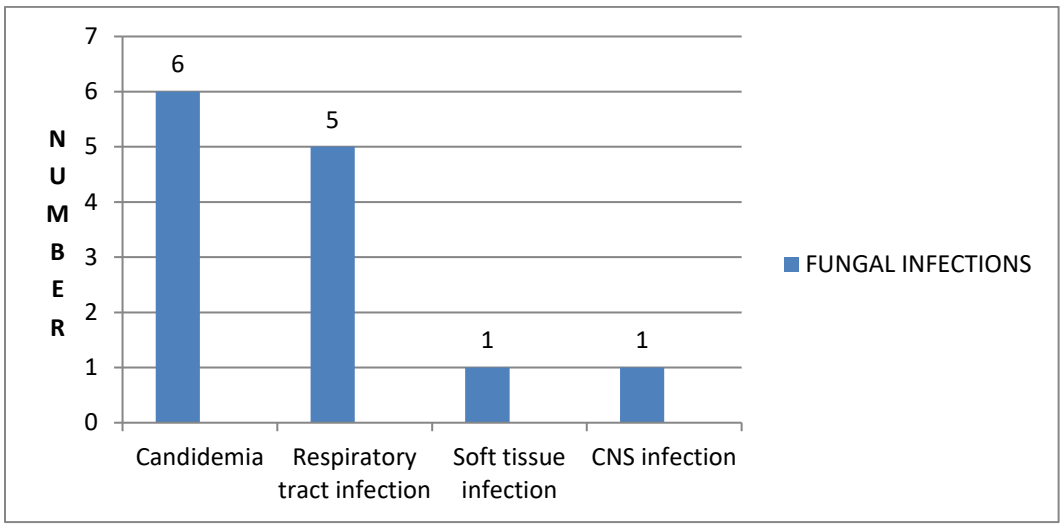


Majority of patients were directly admitted (160) followed by referral (120).

Out of 298 patients, 2 patients had pulmonary tuberculosis, 13 patients had fungal infection (7 patients had both fungal and bacterial infection and 6 patients had only fungal infection) and 290 patients had only bacterial infection.

Fungal Infections:

FIGURE 10: CHARACTERIZATION OF FUNGAL INFECTIONS (n=13)

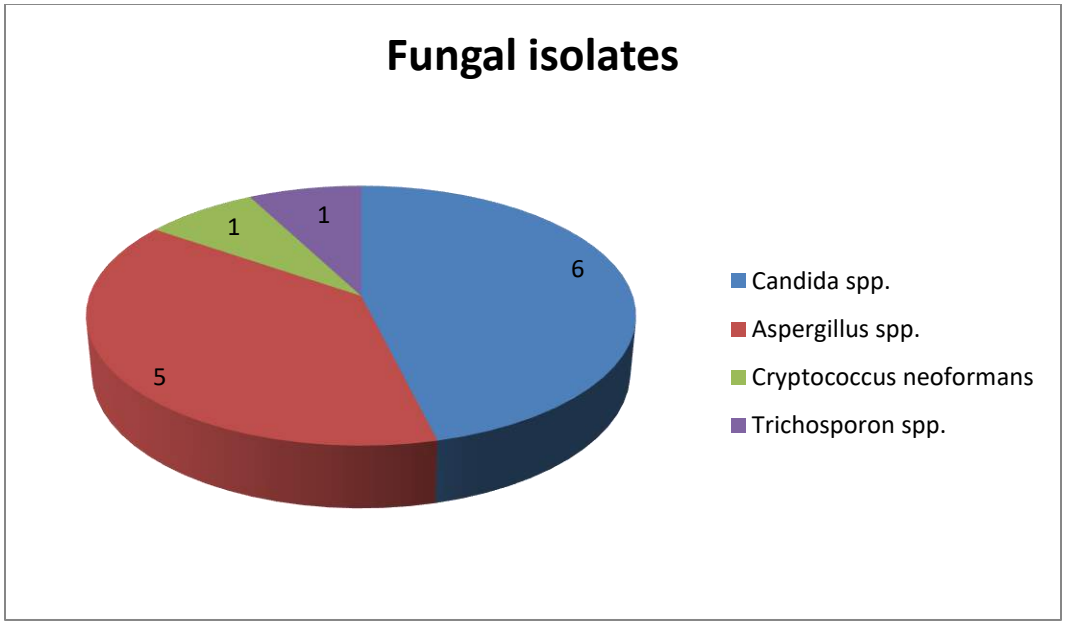


6 patients had candidemia, 5 patients had Pulmonary *Aspergillosis*, 1 patient had *Cryptococcal* meningitis and 1 patient had infection with *Trichosporon* isolated in pus. Most common fungal infection was candidemia followed by respiratory tract infection

TABLE 11: DETAILS OF FUNGAL AND BACTERIAL COINFECTIONS (n=13)

Fungal infection	Bacterial infection	Total infections	Fungal Isolate
Candidemia	- Respiratory tract infection Urinary tract infection	4 1 1	*Candida spp.*
Pulmonary Aspergillosis	-- Urinary tract infection Respiratory tract infection	3 1 1	*Aspergillus spp.*
Soft tissue infection	Urinary tract infection + Soft tissue infection	1	*Trichosporon spp.*
Cryptococcal meningitis	-	1	*Cryptococcus neoformans.*

FIGURE 11: DISTRIBUTION OF FUNGAL ISOLATES (n=13)



Most common type of *Candida species* isolated was *Candida albicans* (50 %) followed by *Candida tropicalis* (33%) followed by *Candida lusitaniae* (17%). Out of Aspergillus isolates, A. flavus was commonest (80%) followed by A. fumigatus (20%).

TABLE 12: ANTIFUNGAL SUSCEPTIBILITY PATTERN OF CANDIDA ISOLATES (n=6)

Antifungal Agents	Number %
Fluconazole	4 (66.6 %)
Flucytosine	4 (66.6 %)
Voriconazole	4 (66.6 %)
Caspofungin	4 (66.6 %)
Amphotericin B	4 (66.6 %)

Bacterial Infections:

Out of 298 patients, 290 patients were having only bacterial infection.

TABLE 13: PATIENTS WITH SINGLE SITE / MULTIPLE SITE INFECTIONS (n=290)

Single site / Multiple site infections	Number of patients
Single site infections	239
Multiple site infections	51

239 patients had infection at single site and 51 patients had infection at multiple sites**.**

FIGURE 12: PATIENTS WITH SINGLE SITE / MULTIPLE SITE INFECTIONS (n=290)

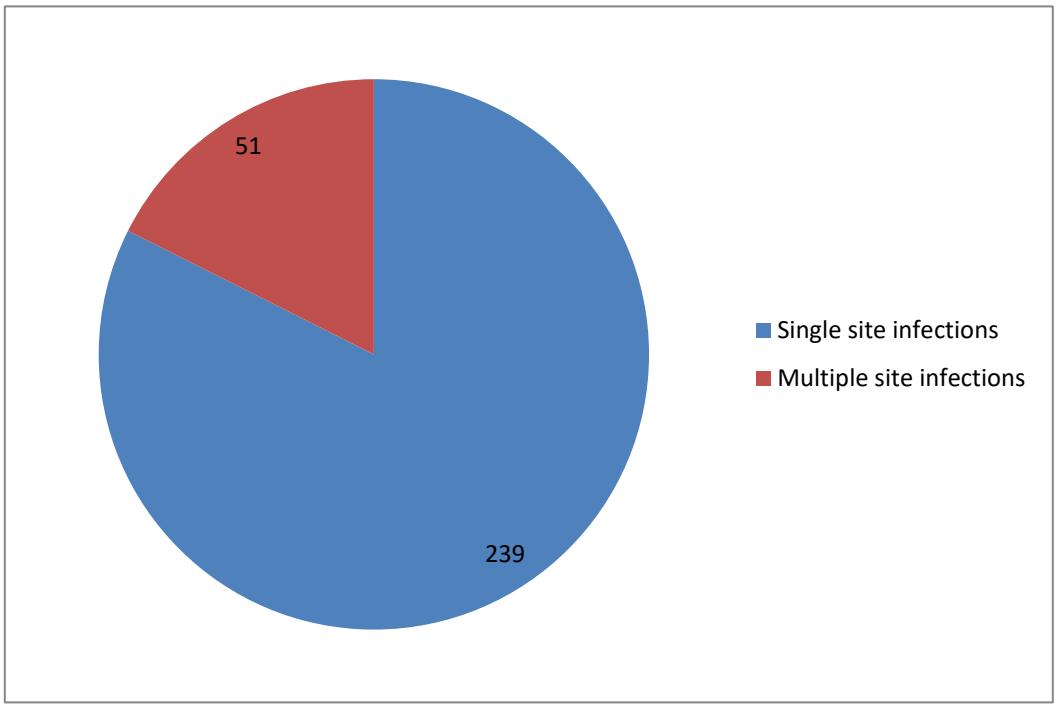


TABLE 14: DETAILS OF SINGLE SITE INFECTIONS

Type of infections	Number of infections
Respiratory tract infection (RTI)	93
Blood stream infection (BSI)	45
Urinary tract infection (UTI)	67
Body fluid infection (BFI)	7
Soft tissue infection (STI)	27
Total	239

TABLE 15: DETAILS OF MULTIPLE SITE INFECTIONS

Type of infections	Number of patients	Number of infections
RTI+BSI	13	26
UTI+BSI	14	28
RTI+UTI	10	20
BSI+STI	5	10
UTI+STI	3	6
RTI+STI	3	6
UTI+BSI+RTI	2	6
UTI+RTI+SSI	1	3
Total	51	105

Among 290 patients, 239 had single site infection,51 had infection at multiple sites (105), thus a total of 344 infections were observed.

TABLE 16: CHARACTERISATION OF INFECTIONS IN ADMITTED PATIENTS (n=344)

Type of infections	Number of infections	Percentage %
Respiratory tract infections	122	35.5
Urinary tract infections	97	28.2
Blood stream infections	79	23.0
Soft tissue infection	39	11.3
Body fluid infection	7	2.0
Total	344	100

Most common type of infections were respiratory tract infections (35.5 %) followed by urinary tract infections (28.2 %)

TABLE 17: HOSPITAL VS COMMUNITY ACQUIRED INFECTIONS (n=344)

Type of infections	Number	Percentage %
Community acquired infections	222	74
Hospital acquired infections	122	26
Total	344	100

74 % of infections were community acquired and 26 % were hospital acquired.

FIGURE 13: HOSPITAL VS COMMUNITY ACQUIRED INFECTIONS (n=344)

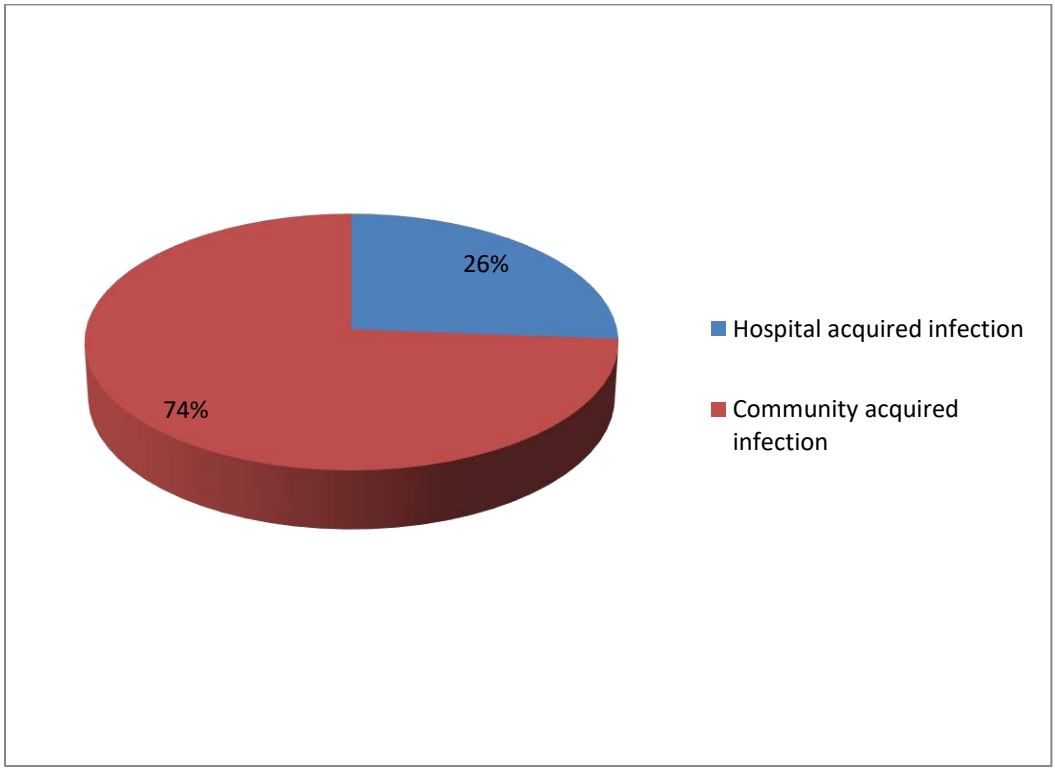


TABLE 18: TYPE OF HOSPITAL VS COMMUNITY ACQUIRED INFECTIONS (n=344)

Type of infections	Hospital acquired infections (n)	Percentage (%)	Community acquired infections (n)	Percentage (%)
Respiratory tract infections	52	42.6	70	31.5
Blood stream infections	28	23.0	51	23.0
Urinary tract infections	26	21.3	71	32.0
Soft tissue infections	13	10.7	26	11.7
Body fluid infections	3	2.5	4	1.8
Total	122	100.	222	100

Most common type of hospital acquired infections were respiratory tract infections (42.6 %) followed by blood stream infections (23.0 %) and most common type of community acquired infections were urinary tract infections (32 %) followed by respiratory tract infections (31.5 %)

FIGURE 14: TYPE OF HOSPITAL ACQUIRED INFECTIONS (n=122)

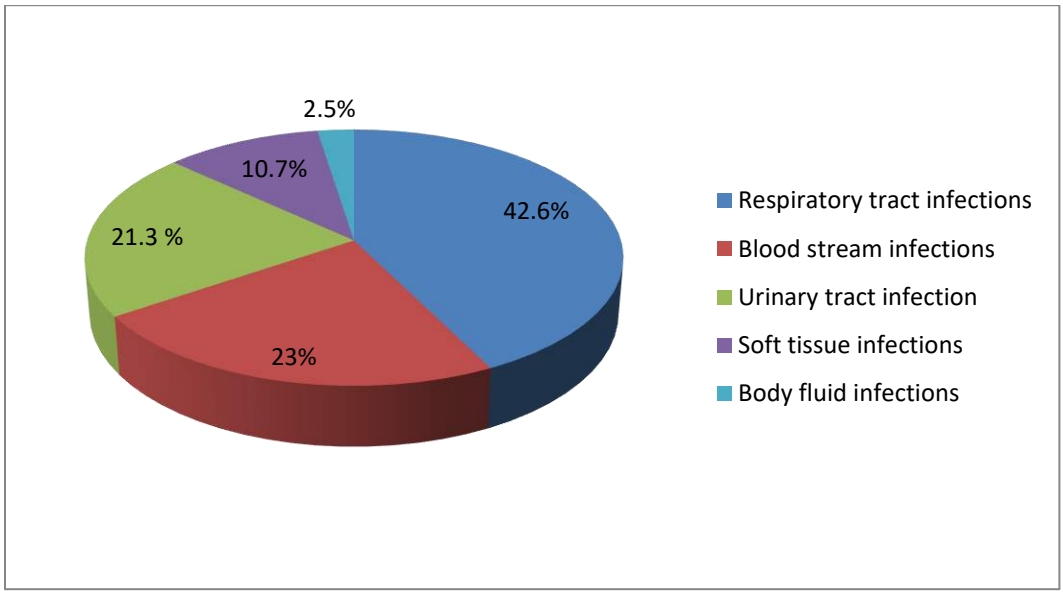


FIGURE 15: TYPE OF COMMUNITY ACQUIRED INFECTIONS (n=222)

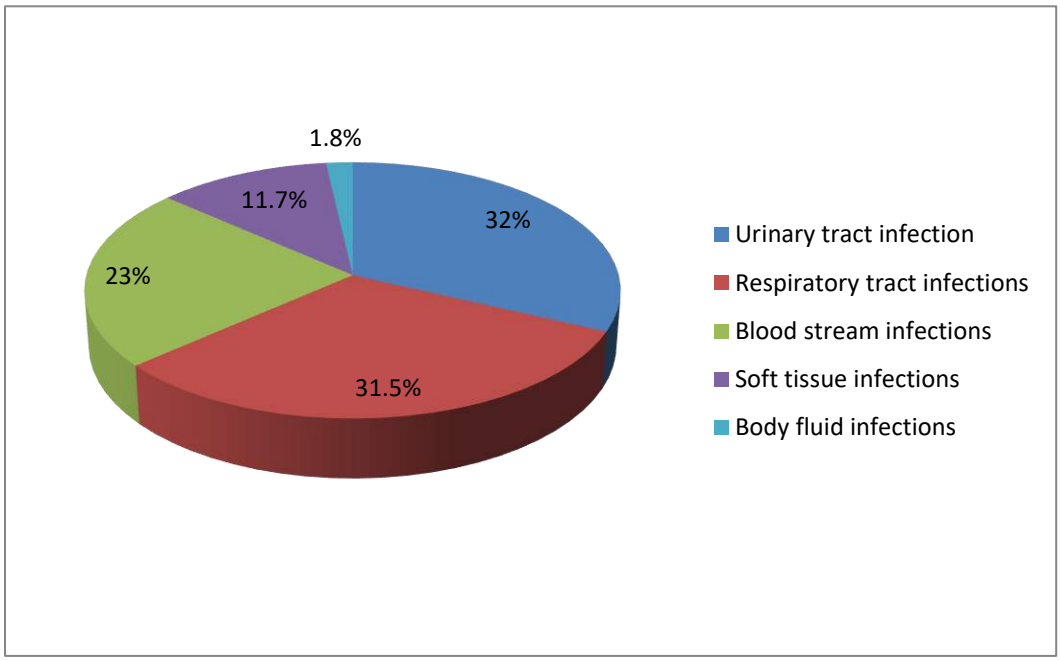


TABLE 19: MONOMICROBIAL VS POLYMICROBIAL INFECTIONS

Infections	Monomicrobial	Polymicrobial
Respiratory tract infections	112	10
Urinary tract infections	95	2
Blood stream infections	78	1
Body fluid infections	6	1
Soft tissue infections	37	2
Total	328	16

Out of 344 infections, in 328 patients monomicrobial growth was obtained whereas in 16 infections polymicrobial (2 isolates in each) growth was obtained. Thus, a total of 360 isolates were obtained.

FIGURE 16: MONOMICROBIAL VS POLYMICROBIAL INFECTIONS

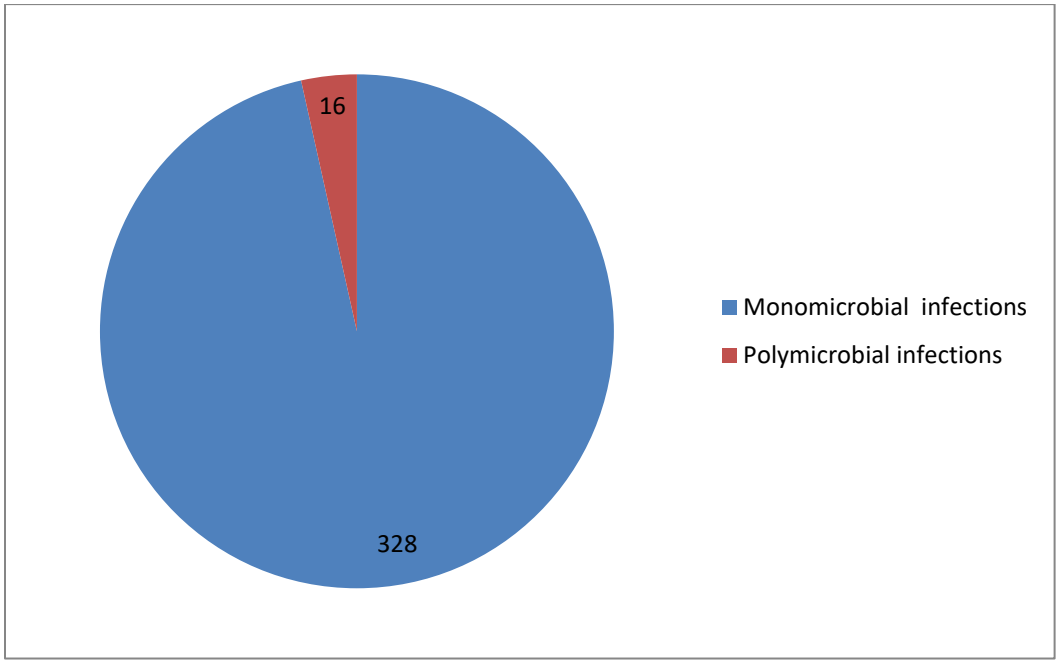


TABLE 20: CHARACTERIZATION OF ISOLATES (n=360)

Isolates	Total number	Percentage (%)
Gram negative	304	84
Gram positive	56	16
Total	360	100

Majority of isolates were Gram negative (84%) followed by Gram positive isolates (16 %).

FIGURE 17: CHARACTERIZATION OF ISOLATES (n=360)

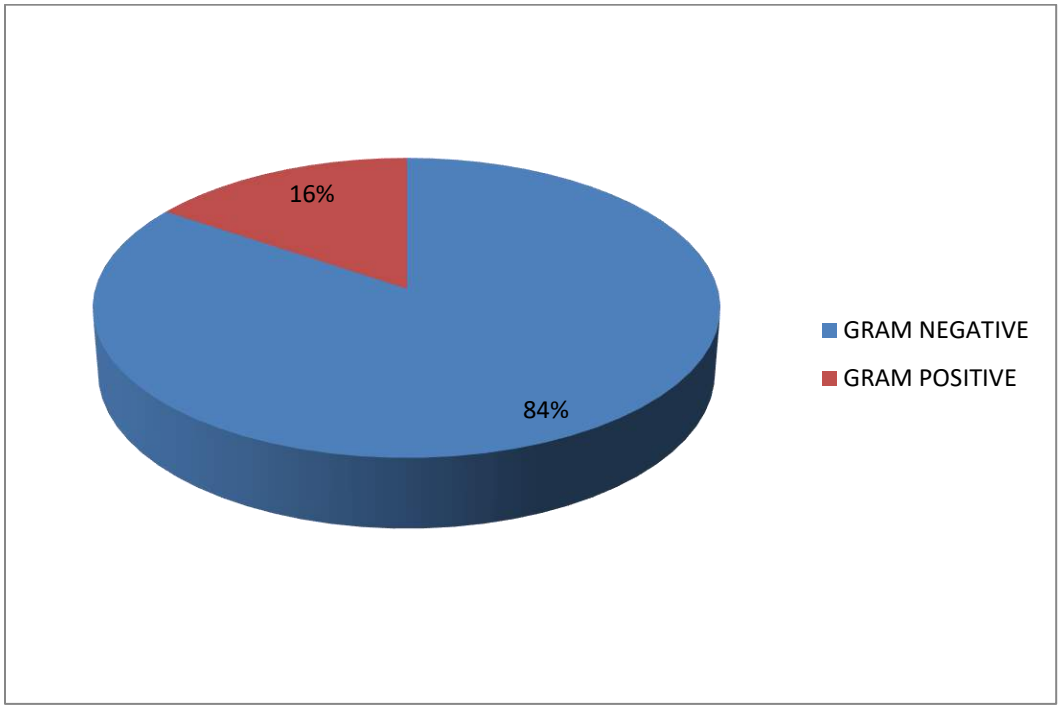


TABLE 21: DISTRIBUTION OF ISOLATES (n=360)

Organisms	Isolates	Percentage %
Klebsiella spp. (K.pneumoniae-109/ *K.oxytoca*- 3 / *K. ozanae* -1	113	31.4
E. coli	80	22.2
Acinetobacter baumannii	47	13.1
Staphylococcus aureus	29	8.1
Pseudomonas spp. (P.aeruginosa-22 / *P. luteola* -3/ *P. stutzeri*-2	27	7.5
Enterococcus spp. (E. faecium-18 */E. faecalis*-6 / *E. gallinarum*-1*)*	25	6.9
Enterobacter spp. (E.cloacae-6/ *E.aerogenes*-4	10	2.8
Burkholderia cepacia	7	1.9
Citrobacter spp. (C.koseri-3 / *C.freundii*-1*)*	4	1.1
Proteus mirabilis	3	0.8
Acromobacter xyloxidans	2	0.6
Myroides	2	0.6
Sphingomonas paucimobilis	2	0.6
Stenotrophomonas maltophilia	2	0.6
Alcaligenes faecalis	1	0.3
Elizabethkingia meningoseptica	1	0.3
Pantoea	1	0.3
Providentia rettgeri	1	0.3
Serratia liquefaciens	1	0.3
Streptococcus agalactiae	1	0.3
Streptococcus pneumoniae	1	0.3
Total	360	100

Most common organism isolated was *Klebsiella spp.* (31.4 %) followed by *E. coli* (22.2 %) and *Acinetobacter baumannii* (13.1 %)

FIGURE 18: DISTRIBUTION OF ISOLATES (n=360)

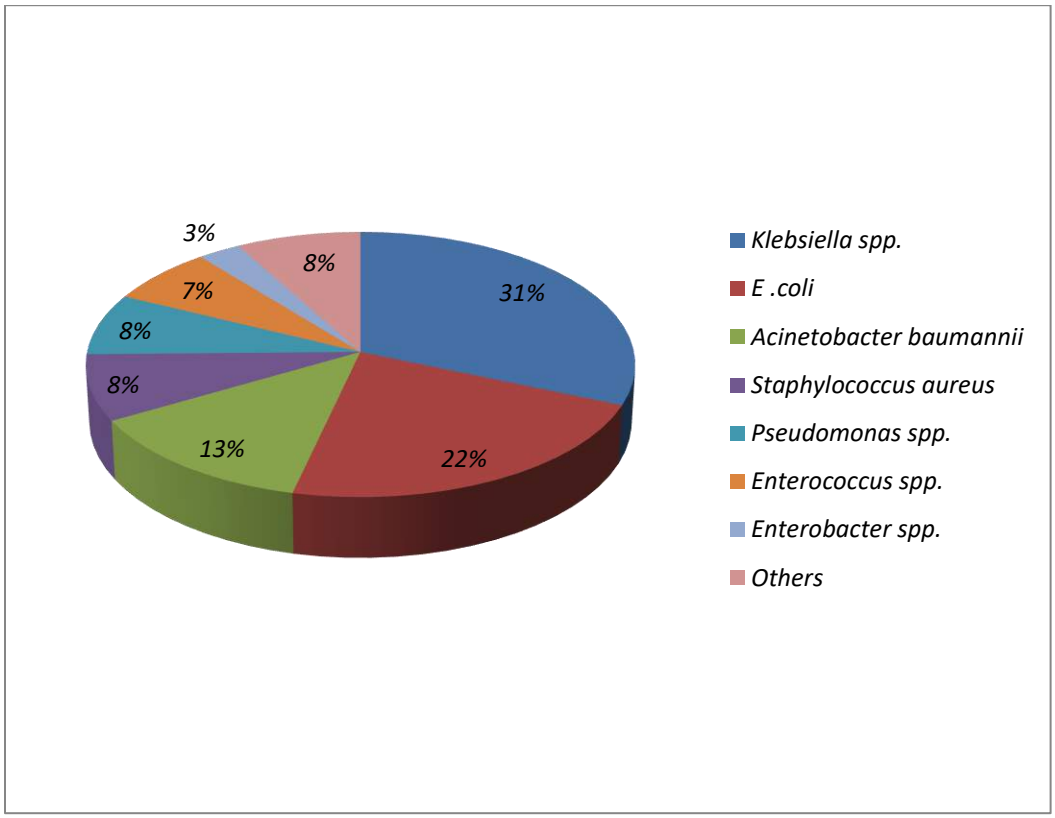
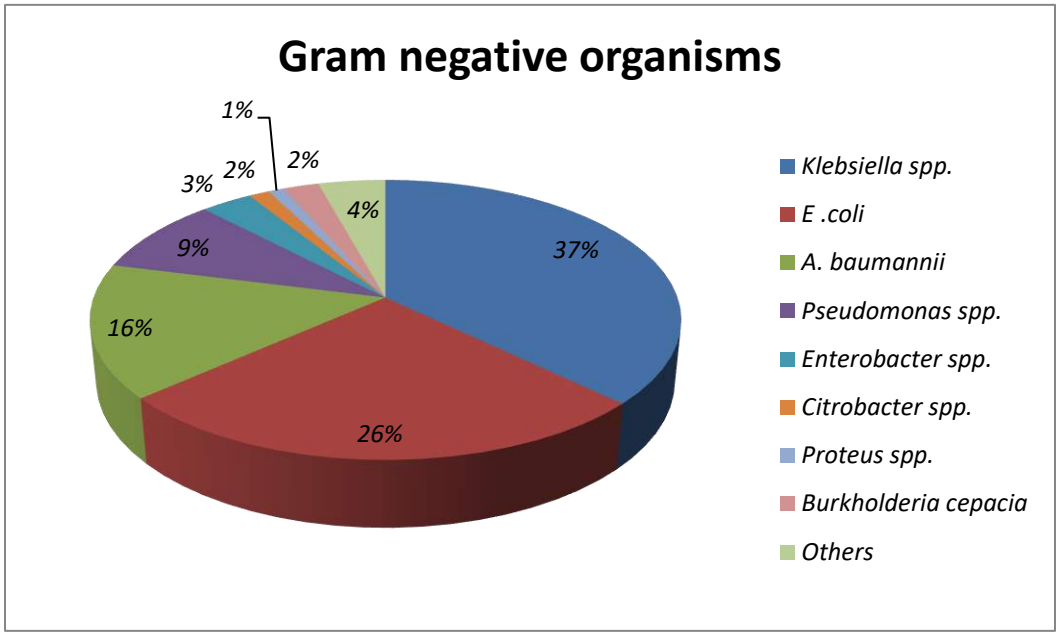
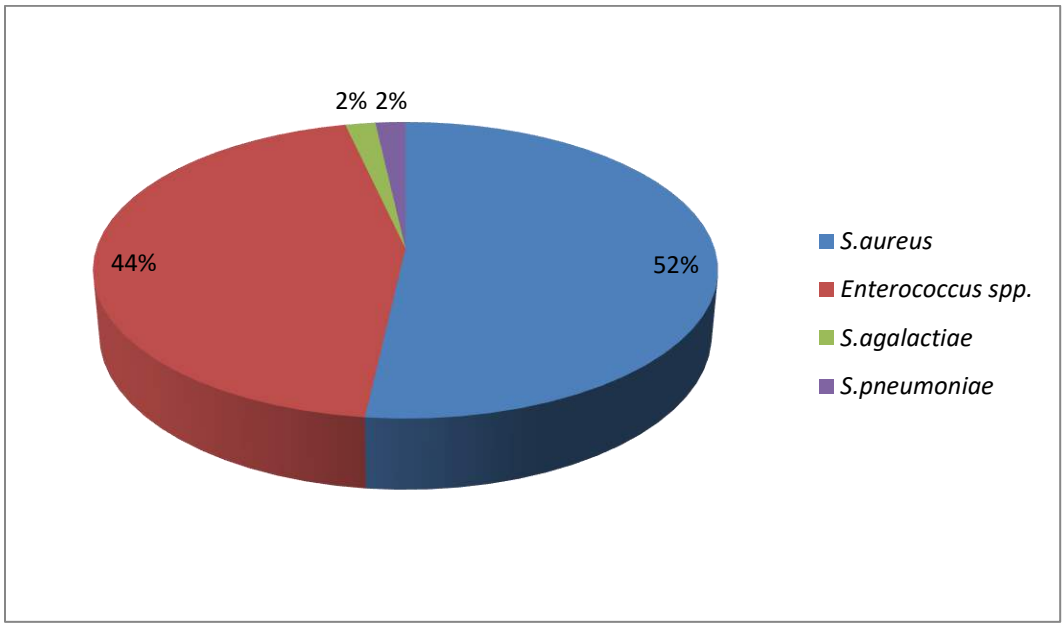


FIGURE 19: DISTRIBUTION OF GRAM NEGATIVE ISOLATES (n=304)



In Gram negative isolates, *Klebsiella spp.* was most common (37 %) followed by *E. coli* (26 %)

FIGURE 20: DISTRIBUTION OF GRAM POSITIVE ISOLATES(n=56)



In Gram positive isolates *Staphylococcus aureus* was most common (52 %) followed by *Enterococcus spp.(*44%)

TABLE 22: FLORA OF HOSPITAL VS COMMUNITY ACQUIRED INFECTIONS (n=360)

Organisms	Number of isolates in Community acquired	Percentage (%)	Number of isolates in Hospital acquired	Percentage (%)
Klebsiella spp.	81	35.4	32	24.4
E. coli	70	30.6	10	7.6
Acinetobacter baumannii	17	7.4	30	22.9
Staphylococcus aureus	22	9.6	7	5.3
Enterococcus	20	8.7	5	3.8
Pseudomonas spp.	2	0.9	25	19.1
Enterobacter	8	3.5	2	1.5
Burkholderia cepacia	1	0.4	6	4.6
Citrobacter spp.	3	1.3	1	0.8
Proteus spp.	1	0.4	2	1.5
Acromobacter xyloxidans	1	0.4	1	0.8
Myroides spp.	0	0.0	2	1.5
Sphingomonas paucimobilis	0	0.0	2	1.5
Stenotrophomonas maltophilia	1	0.4	1	0.8
Alcaligenes faecalis	0	0.0	1	0.8
Elizabethkingia meningoseptica	0	0.0	1	0.8
Pantoea spp.	1	0.4	0	0.0
Providentia rettgeri	1	0.4	0	0.0
Serratia liquefaciens	0	0.0	1	0.8
Streptococcus agalactiae	0	0.0	1	0.8
Streptococcus pneumoniae	0	0.0	1	0.8
Total	229	100.0	131	100

Most common organism causing community acquired infection was *Klebsiella spp*. (35.4%) followed by *E. coli* (30.6 %) and most common organism causing hospital acquired infection was *Klebsiella spp.*(24.4 %) followed by *Acinetobacter baumannii* (22.9 %) and *Pseudomonas spp*.(19.1 %)

FIGURE 21: FLORA OF HOSPITAL ACQUIRED INFECTIONS (n=131)

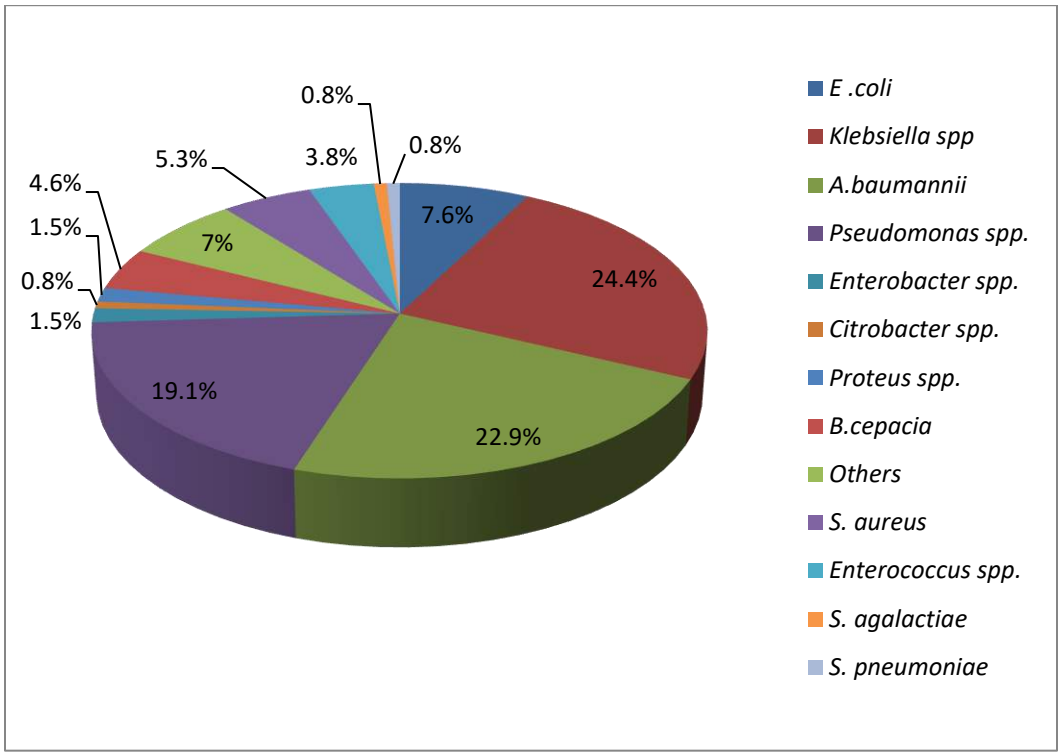


FIGURE 22: FLORA OF COMMUNITY ACQUIRED INFECTIONS (n=229)

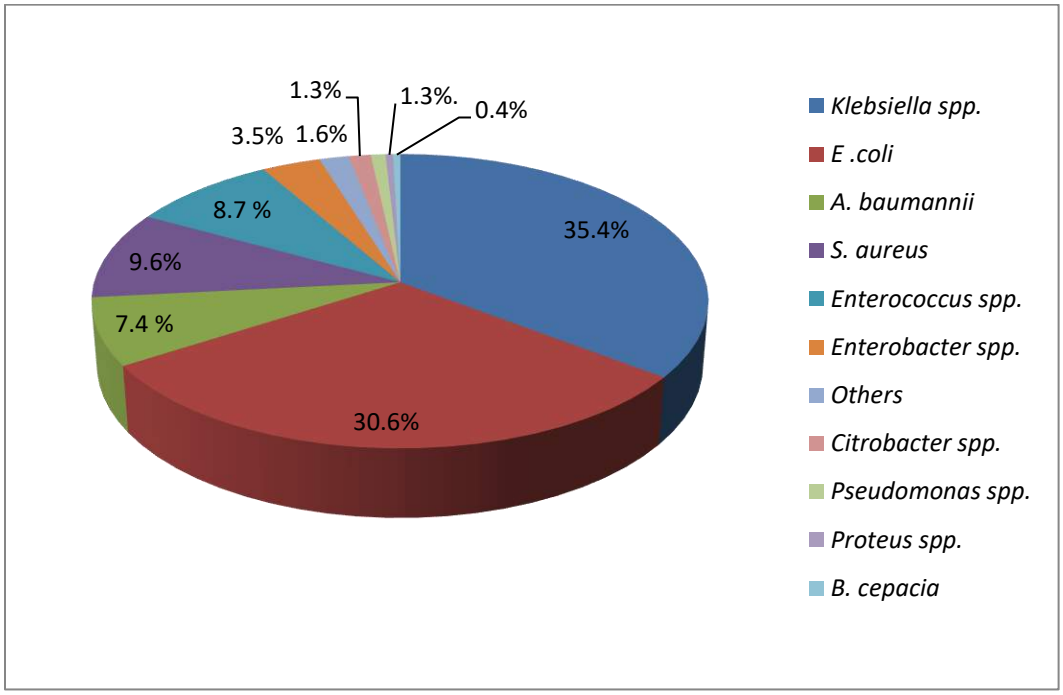


TABLE 23: SAMPLE WISE DISRIBUTION OF ISOLATES (n=360)

Isolates	Blood	Respiratory samples					Soft tissue samples			Total
		ET	Sputum	BAL	Urine	Body fluids	Tissue	Wound swab	Pus	
Gram negative	**57**	**95**	**34**	**1**	**83**	**5**	**5**	**15**	**9**	**304**
Klebsiella spp.	16	42	20	1	27	1	0	6	0	113
E. coli	17	7	5	0	39	2	2	3	5	80
A. baumannii	8	28	5	0	1	1	1	2	1	47
Pseudomonas spp.	3	7	3	0	7	1	1	3	2	27
Enterobacter cloacae	0	6	1	0	1	0	0	1	1	10
Burkholderia cepacia	3	3	0	0	0	0	1	0	0	7
Citrobacter spp.	2	0	0	0	2	0	0	0	0	4
A. xyloxidans	2	0	0	0	0	0	0	0	0	2
Myroides spp.	0	0	0	0	2	0	0	0	0	2
Proteus spp.	0	1	0	0	2	0	0	0	0	3
S.paucimobilis	1	1	0	0	0	0	0	0	0	2
S. maltophilia	2	0	0	0	0	0	0	0	0	2
Alcaligenes faecalis	1	0	0	0	0	0	0	0	0	1
E.meningoseptica	1	0	0	0	0	0	0	0	0	1
Pantoea spp.	0	0	0	0	1	0	0	0	0	1
Providentia rettgeri	0	0	0	0	1	0	0	0	0	1
Serratia liquefaciens	1	0	0	0	0	0	0	0	0	1
Gram positive	**23**	**2**	**0**	**0**	**16**	**3**	**2**	**4**	**6**	**56**
Enterococcus spp.	6	0	0	0	15	2	1	0	1	25
S. aureus	16	2	0	0	1	0	1	4	5	29
S. pneumoniae	0	0	0	0	0	1	0	0	0	1
S. agalactiae	1	0	0	0	0	0	0	0	0	1
Total	80	97	34	1	99	8	7	19	15	360

TABLE 24: SAMPLE WISE DISTRIBUTION OF FLORA IN HOSPITAL VS COMMUNITY ACQUIRED INFECTIONS (n=360)

Isolates	BSI		RTI		UTI		STI		BFI		Total
Gram negative	**HAI**	**CAI**	**HAI**	**CAI**	**HAI**	**CAI**	**HAI**	**CAI**	**HAI**	**CAI**	
Klebsiella spp.	5	11	20	43	6	21	1	5	0	1	113
E. coli	1	16	1	11	5	34	3	7	0	2	80
A. baumannii	5	3	21	12	1	0	2	2	1	0	47
Pseudomonas spp.	3	0	9	1	6	1	6	0	1	0	27
Enterobacter spp.	0	0	1	6	1	0	0	2	0	0	10
B. cepacia	3	0	3	0	0	0	0	1	0	0	7
Citrobacter spp.	0	2	0	0	1	1	0	0	0	0	4
A. xyloxidans	1	1	0	0	0	0	0	0	0	0	2
Myroides spp.	0	0	0	0	2	0	0	0	0	0	2
Proteus spp.	0	0	1	0	1	1	0	0	0	0	3
S.paucimobilis	1	0	1	0	0	0	0	0	0	0	2
S. maltophilia	1	1	0	0	0	0	0	0	0	0	2
A.faecalis	1	0	0	0	0	0	0	0	0	0	1
E.meningoseptica	1	0	0	0	0	0	0	0	0	0	1
Pantoea spp.	0	0	0	0	0	1	0	0	0	0	1
P.rettgeri	0	0	0	0	0	1	0	0	0	0	1
S.liquefaciens	1	0	0	0	0	0	0	0	0	0	1
Gram positive isolates											
Enterococcus	1	5	0	0	4	11	0	2	0	2	25
S. aureus	4	12	1	1	0	1	2	8			29
S.pneumoniae	0	0	0	0	0	0	0	0	1	0	1
S. agalactiae	1	0	0	0	0	0	0	0	0	0	1
Total	29	51	58	74	27	72	14	27	3	5	360

Most common organism causing urinary tract infection was *Klebsiella spp*. (22.2 %) and *Pseudomonas spp*. (22 .2%) in hospital acquired infections and in community acquired infections was *E. coli* (47.2%) followed by *Klebsiella spp*. (29.2%) are most common.

Most common organism causing respiratory tract infection in hospital acquired infections was *Acinetobacter baumannii* (36.2 %) followed by *Klebsiella spp.* (34.5 %) and in community acquired infections was *Klebsiella spp.* (59.7%) followed by *Acinetobacter baumannii* (16.7%)

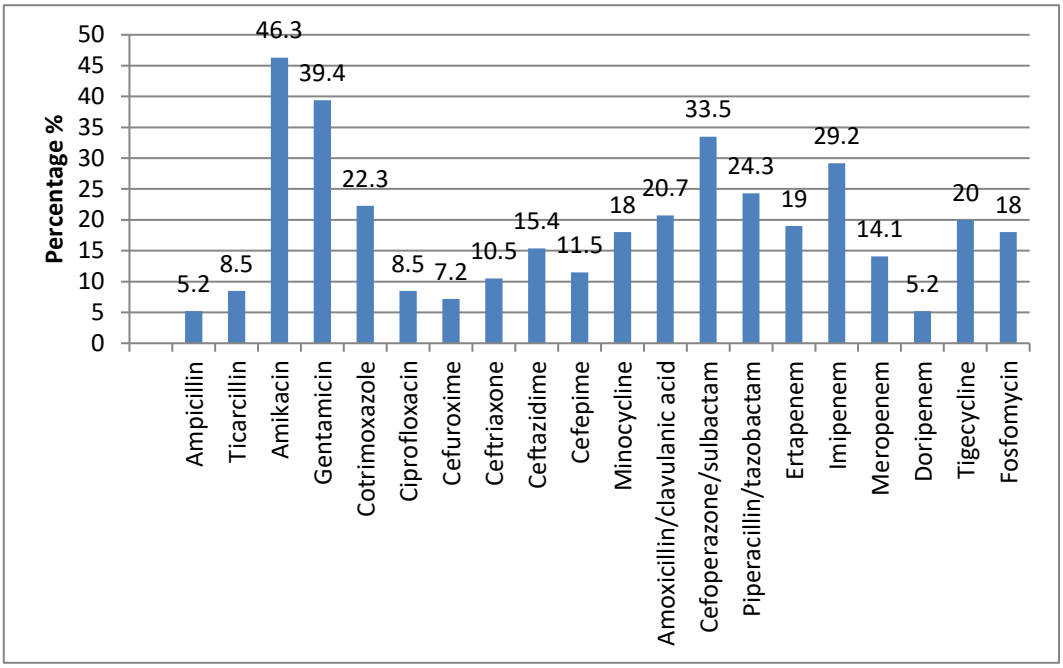
Most common organism causing blood stream infection in hospital acquired infection was *Klebsiella spp*. (17.2%) and *Acinetobacter baumannii* (17.2 %) and in community acquired infection was *E. coli* (31.4%) followed by *Staphylococcus aureus* (23.5 %)

Most common organism causing soft tissue infection was *Pseudomonas spp.* (50.0%) followed by *Acinetobacter baumannii* (16.7%) in hospital acquired infections and in community acquired infections *Staphylococcus aureus* (29.6 %) followed by *E coli* (25.9%) in community acquired infections.

TABLE 25: OVERALL ANTIMICROBIAL SUSCEPTIBILITY PATTERN OF GRAM NEGATIVE ISOLATES(n=304)

Antimicrobial agents	No. of isolates	Sensitivity (%)
Ampicillin	16	5.2
Ticarcillin	26	8.5
Amikacin	141	46.3
Gentamicin	120	39.4
Cotrimoxazole	68	22.3
Ciprofloxacin	26	8.5
Cefuroxime	22	7.2
Ceftriaxone	32	10.5
Ceftazidime	47	15.4
Cefepime	35	11.5
Minocycline	55	18.0
Amoxicillin/clavulanicacid	63	20.7
Cefoperazone/sulbactam	102	33.5
Piperacillin/tazobactam	74	24.3
Ertapenem	58	19.0
Imipenem	89	29.2
Meropenem	43	14.1
Doripenem	16	5.2
Tigecycline	61	20.0
Fosfomycin	55	18.0

FIGURE 23: OVERALL ANTIMICROBIAL SUSCEPTIBILITY PATTERN OF GRAM NEGATIVE ISOLATES (n=304)



Gram negative isolates showed low susceptibility to Ampicillin (5.2 %),Ciprofloxacin (8.5%), while isolates were highly susceptible to Amikacin (46.3 %), Gentamicin (39.4 %), cefoperazone/sulbactam (33.5 %).

TABLE 26: OVERALL ANTIMICROBIAL RESISTANCE PATTERN OF GRAM NEGATIVE ISOLATES IN COMMUNITY VS HOSPITAL ACQUIRED INFECTIONS (n=304)

Antimicrobial agents	Hospital acquired infections (117) n (%)	Community acquired infections (187) n (%)	P-value
Ampicillin	105 (89.8)	169(90.4)	0.857
Ticarcillin	105(89.8)	178(95.2)	0.068
Amikacin	74(63.3)	113 (60.5)	0.622
Gentamicin	77(65.9)	110 (59)	0.223
Cotrimoxazole	89(76.1)	147 (78.7)	0.604
Ciprofloxacin	102 (87.2)	177 (94.7)	0.021
Cefuroxime	109 (78.6)	173(92.6)	0.831
Ceftriaxone	104(93.2)	168 (89.9)	0.792
Ceftazidime	93 (79.5)	164 (87.8)	0.053
Cefepime	94(80.4)	158(84.5)	0.349
Minocycline	90(77)	162 (86.7)	0.028
Amoxicillin/ clavulanicacid	96 (82.1)	138(73.8)	0.096
Cefoperazone/ sulbactam	76 (65)	168 (89.9)	0.0001
Piperacillin/ tazobactam	95 (81.2)	167 (89.4)	0.046
Ertapenem	104(88.9)	168 (89.9)	0.792
Imipenem	87(74.4)	165 (88.3)	0.001
Meropenem	96(82.1)	164(87.8)	0.173
Doripenem	111(94.8)	177(94.7)	0.933
Tigecycline	83(71)	152(81.3)	0.36
Fosfomycin	107(91.5)	143(76.5)	0.008

On comparing resistance pattern of hospital vs community acquired infections drugs like Ciprofloxacin, Minocycline, Cefoperazone/sulbactum, Piperacillin/tazobactum, Imipenem, Fosfomycin were statistically significant

TABLE 27: OVERALL ANTIMICROBIAL SUSCEPTIBILITY PATTERN OF GRAM POSITIVE ISOLATES (n=56)

Antimicrobial agents	Number of isolates	Percentage (%)
Benzyl Penicillin	12	22.2
Gentamicin	27	50
Ciprofloxacin	12	22.2
Levofloxacin	9	16.6
Clindamycin	3	5.5
Erythromycin	12	22.2
Daptomycin	18	33.3
Tetracycline	31	57.4
Cotrimoxazole	8	14.8
Rifampicin	18	33.3
Teicoplanin	26	48.1
Vancomycin	37	68.5
Linezolid	41	75.9

Gram positive isolates showed low susceptibility to Clindamycin (5.5 %), Levofloxacin (16.6 %), Penicillin (22.2 %), Erythromycin (22.2 %). High sensitivity was seen for Linezolid (75.9%), Tetracycline (57.4 %), Vancomycin (68.5 %), Gentamicin (50 %).

FIGURE 24: OVERALL ANTIMICROBIAL SUSCEPTIBILITY PATTERN OF GRAM POSITIVE ISOLATES (n=56)

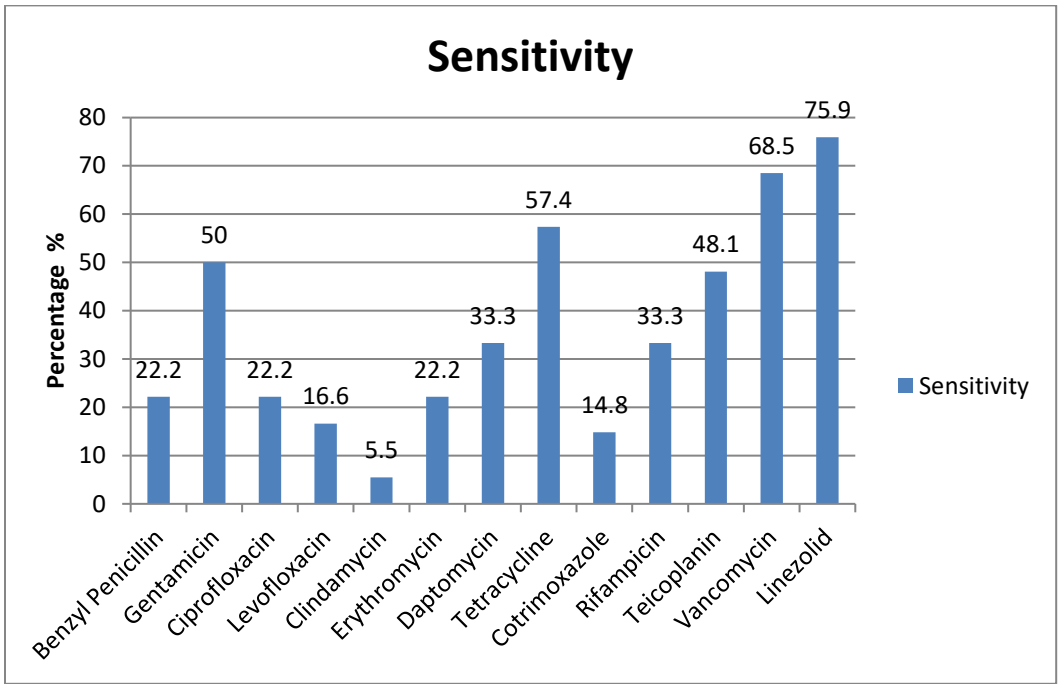
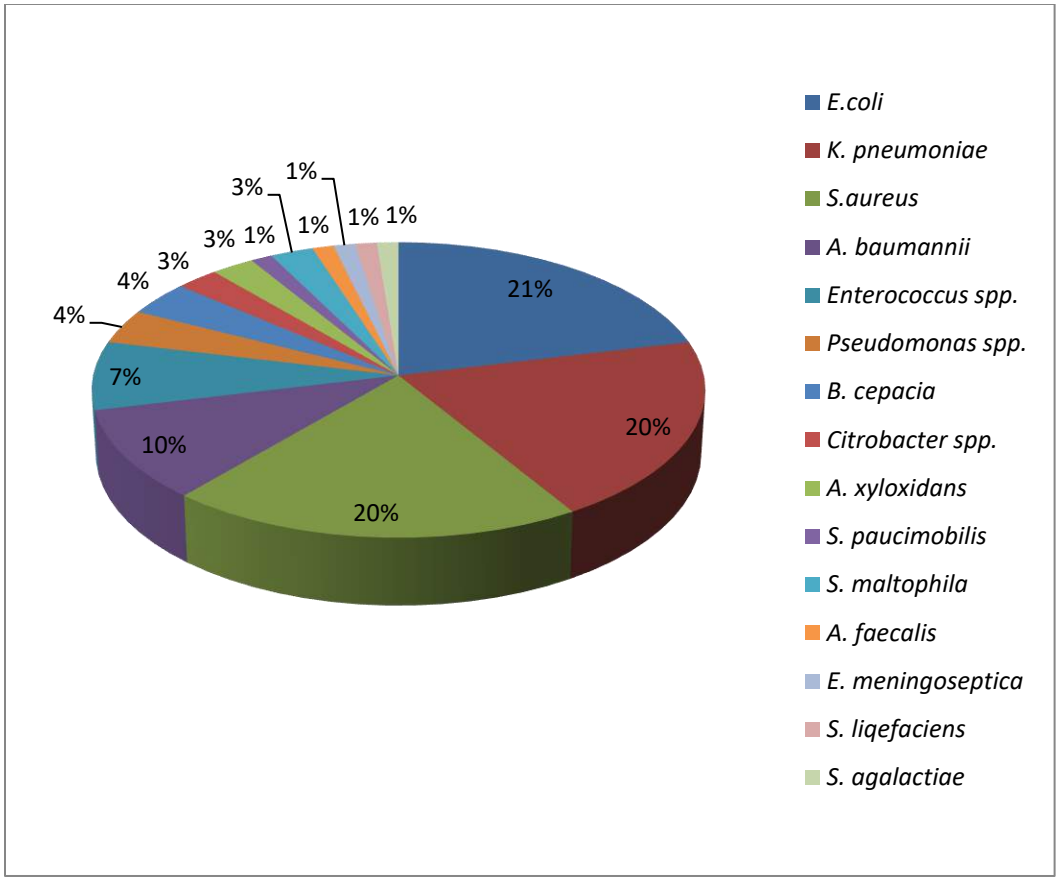


TABLE 28: OVERALL ANTIMICROBIAL RESISTANCE PATTERN OF GRAM POSITIVE ISOLATES IN HOSPITAL VS COMMUNITY ACQUIRED INFECTIONS (n=56)

Antimicrobial agents	Hospital acquired infections (14) n (%)	Community acquired infections (42) n (%)	P-value
Benzyl Penicillin	9 (64.3)	8 (19.1)	0.755
Gentamicin	7 (50)	25 (59.6)	0.532
Ciprofloxacin	12 (85.8)	36 (85.8)	0.0001
Levofloxacin	11(78.6)	36 (85.8)	0.0001
Clindamycin	12 (85.8)	41 (97.7)	0.001
Erythromycin	12 (85.8)	0(0)	0.001
Daptomycin	7 (50)	26 (62)	0.43
Tetracycline	7 (50)	22(52.4)	0.877
Cotrimoxazole	9(74.3)	30 (71.5)	0.614
Rifampicin	6 (42.9)	22(52.4)	0.527
Teicoplanin	5 (35.8)	16(38.1)	0.873
Vancomycin	5 (35.8)	17(40.5)	0.752
Linezolid	2 (14.3)	13 (31)	0.003

On comparing resistance pattern of hospital vs community acquired infections, drugs like Ciprofloxacin, Levofloxacin, Clindamycin, Erythromycin, Linezolid were statistically significant.

FIGURE 25: DISTRIBUTION OF BLOOD ISOLATES (n=80)



Most common organism causing blood stream infection was *E. coli* (21 %) followed by *Klebsiella spp*. (20 %) and *Staphylococcus aureus* (20 %)

TABLE 29: ANTIMICROBIAL SENSITIVITY PROFILE OF GRAM NEGATIVE BLOOD ISOLATES (n=57)

Antibiotics	*E. coli* (n=17)	*Klebsiella spp.* (n=16)	*Acinetobacter baumannii* (n=8)	*Pseudomonas spp.*(n=3)	*B. cepacia* (n=3)	*Citrobacter spp.*(n=2)	*Achromobacter spp* (n=2)	*S. paucimobilis* (n=1)	*S. maltophilia* (n=2)	*A. faecalis* (n=1)	*E meningo septica* (n=1)	*Serratia* (n=1)
Ampicillin	2(12%)	--	0 (0 %)	1(33%)	--	1(50 %)	--	--	--	--	--	--
Amikacin	15(88%)	7(44%)	1(13%)	2(67%)	--	2(100 %)	1(50 %)	--	--	--	--	1(100)
Gentamicin	12(71%)	6(38%)	1(13%)	2(67%)	--	2(100 %)	--	--	--	1(100%)	--	1(100 %)
Cotrimoxazole	7(41%)	5(31%)	1(13%)	1(33%)	2(67%)	1(50 %)	--	--	2(100%)	--	0(0%)	--
Cefuroxime	3(18%)	4(25%)	1(13%)	1(33%)	--	1(50 %)	--	--	--	--	--	--
Ceftazidime	--	--	1(13%)	2(67%)	2(67%)	1(50 %)	0(0%)	--	--	1(100%)	0(0%)	--
Cefepime	7(41%)	5(31%)	1(13%)	2(67%)	--	1(50 %)	0(0%)	--	--	1(100%)	--	0(0%)
Levofloxacin	--	--	0(0%)	1(33%)	0(0%)	1(50 %)	0(0%)	--	1(50%)	0(0 %)	0(0%)	--
Ciprofloxacin	0(0%)	3(19%)	1(13%)	2(67%)	--	1(50 %)	2(100 %)	--	--	0(0%)	--	0(0%)
Piperacillin-tazobactum	10(59%)	5(31%)	0(0%)	2(67%)	--	1(50 %)	0(0%)	--	--	1(100%)	--	0(0%)
Cefoperazone-Sulbactum	11(65%)	6(38%)	1(13%)	2(67%)	--	1(50 %)	--	1(100 %)	--	1(100%)	--	0(0%)

Amoxiclav	6(35%)	3(19%)	1(13%)	1(33%)	--	1(50 %)	--	1(100 %)	--	--	--	0(0%)
Ertapenem	4(24%)	1(6%)	--	--	--	1(50 %)	--	--	--	--	--	0(0%)
Imipenem	5(29%)	3(19%)	1(13%)	1(33%)	--	1(50 %)	--	--	--	--	--	--
Meropenem	5(29%)	2(13%)	1(13%)	1(33%)	2(67%)	2(100 %)	0(0%)	--	--	--	--	--
Doripenem	2(12%)	0(0%)	1(13%)	1(33%)	--	1(50 %)	--	--	--	--	--	--
Minocycline	2(12%)	0(0%)	4(50%)	1(33%)	0(0%)	1(50 %)	0(0%)	1 (100%)	2 (100%	0(0%)	--	--

E. coli showed maximum sensitivity for amikacin (88 %) followed by gentamicin (71 %). *Klebsiella* spp. showed maximum sensitivity for amikacin (44 %) followed by gentamicin (38 %) and cefoperazone sulbactum (38%). *Acinetobacter baumannii* showed maximum sensitivity for minocycline (50 %)

FIGURE 26: ANTIMICROBIAL SENSITIVITY PROFILE OF COMMON GRAM NEGATIVE BLOOD ISOLATES (n=57)

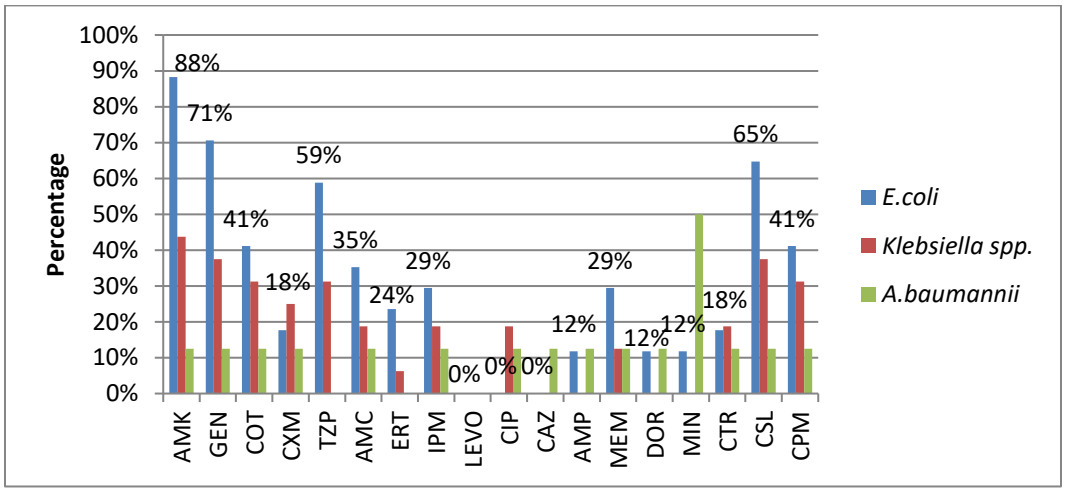


TABLE 30: ANTIMICROBIAL SENSITIVITY PROFILE OF GRAM POSITIVE BLOOD ISOLATES (n=23)

Antibiotics	***Enterococcus spp.* (n=6)**	***Staphylococcus aureus* (n=16)**	***Streptococcus agalactiae*(n=1)**
Penicillin	3(50%)	1(6%)	1(100 %)
Daptomycin	1(17%)	9(56%)	0(0%)
Ciprofloxacin	3(50%)	1(6%)	0(0%)
Levofloxacin	3(50%)	1(6%)	1(100 %)
Gentamicin	3(50%)	8(50%)	0(0%)
Cotrimoxazole	0(0%)	6(38%)	0(0%)
Tetracycline	3(50%)	11(69%)	0(0%)
Rifampicin	0(0%)	15(94%)	0(0%)
Vancomycin	3(50%)	11(69%)	1(100 %)
Teicoplanin	3(50%)	11(69%)	0(0%)
Linezolid	4(67%)	11(69%)	1(100 %)

Enterococcus spp. showed maximum sensitivity for linezolid (67 %)

Staphylococcus aureus showed maximum sensitivity for rifampicin (94 %)

FIGURE 27: ANTIMICROBIAL SENSITIVITY PROFILE OF GRAM POSITIVE BLOOD ISOLATES (n=23)

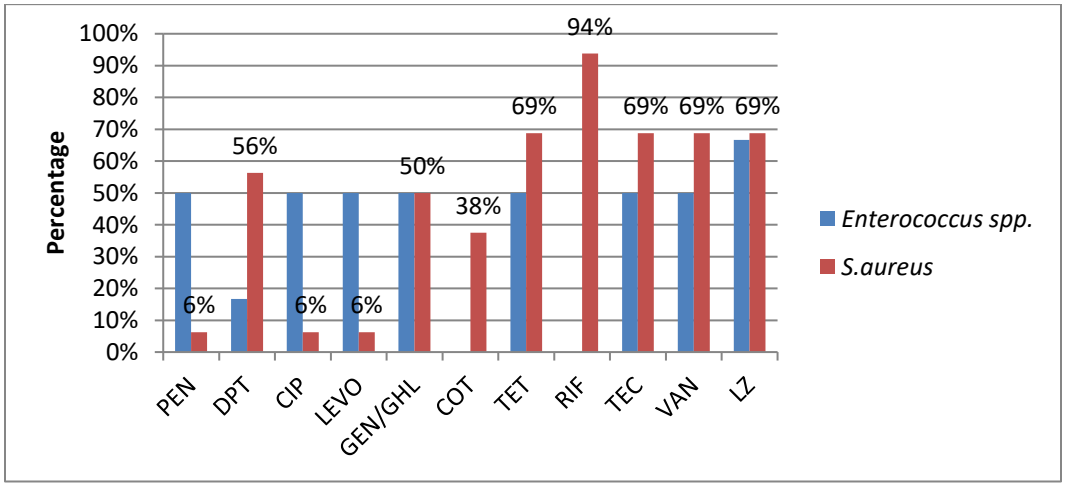
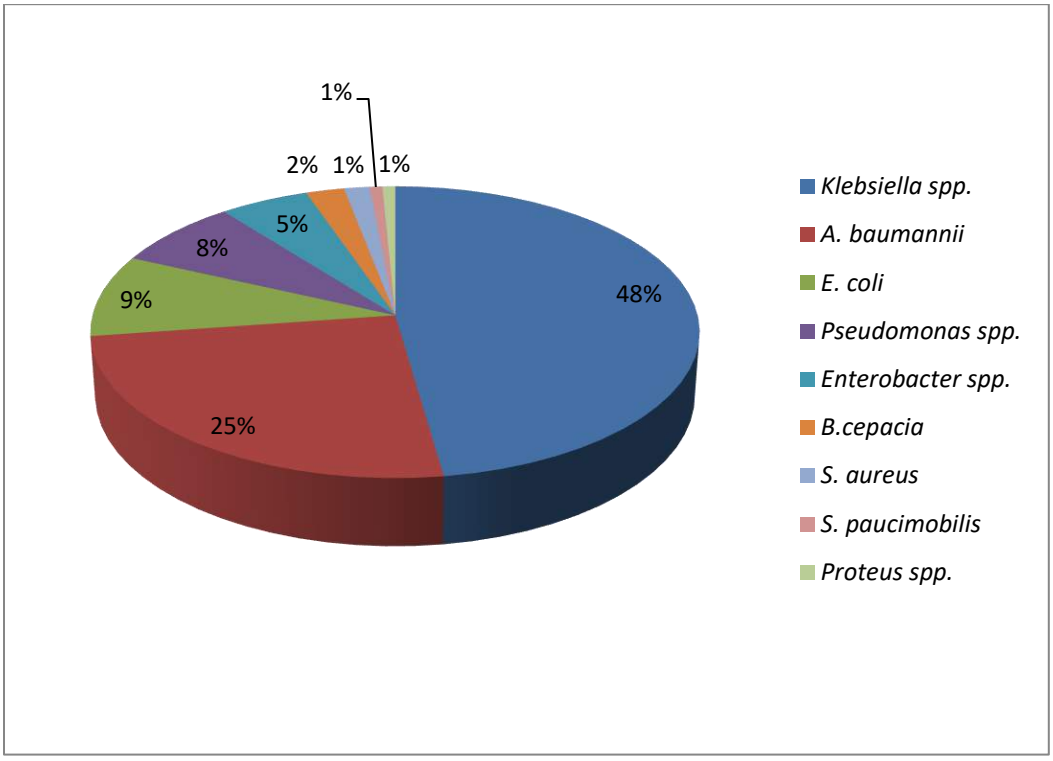


FIGURE 28 -DISTRIBUTION OF RESPIRATORY ISOLATES (n=132)



Most common organism causing respiratory tract infection was *Klebsiella spp.* (48 %) followed by *Acinetobacter baumannii* (25%)

TABLE 31: ANTIMICROBIAL SENSITIVITY PROFILE OF GRAM NEGATIVE RESPIRATORY ISOLATES (n=130)

Antibiotics	***Klebsiella spp.*** **(n=63)**	***Acinetobacter baumannii*** **(n=33)**	***E. coli*** **(n=12)**	***Pseudomonas sp.*****(n=10)**	***Enterobacter sp.*****(n=7)**	***Burkholderia cepacia*****(n=3)**	***Proteus sp.*****(n=1)**	***Sphingomonas paucimobilis*** **(n=1)**
Ampicillin	--	--	1(8%)	1(10%)	2(29%)	--	0(0%)	0(0%)
Ticarcillin	--	1(3%)	1(8%)	2(20%)	1(14%)	0(0%)	0(0%)	0(0%)
Amikacin	26(41%)	1(3%)	10(83%)	4(40%)	4(57%)	--	1(100 %	0(0%)
Gentamicin	23(37%)	8(24%)	9(75%)	3(30%)	2(29%)	--	1(100 %	0(0%)
Cotrimoxazole	13(21%)	5(15%)	3(25%)	1(10%)	3(43%)	0(0%)	1(100 %	0(0%)
Ceftazidime	--	3(9%)	--	2(20%)	2(29%)	0(0%)	1(100%)	0(0%)
Cefepime	4(6%)	0(0%)	3(25%)	0(0%)	1(14%)	0(0%)	0(0%)	0(0%)
Ciprofloxacin	4(6%)	1(3%)	1(8%)	3(30%)	2(29%)	--	0(0%)	0(0%)
Levofloxacin	4(6%)	3(9%)	1(8%)	2(20%)	2(29%)	0(0%)	0(0%)	0(0%)
Piperacillin-tazobactum	6(10%)	0(0%)	1(8%)	2(20%)	1(14%)	--	1(100 %	0(0%)

Cefoperazone – sulbactum	9(14%)	6(18%)	3(25%)	4(40%)	1(14%)	--	1(100 %)	0(0%)
Amoxiclav	5(8%)	--	2(17%)	--	1(14%)	--	0(0%)	0(0%)
Ertapenem	6(10%)	--	5(42%)	--	2(29%)	--	0(0%)	0(0%)
Imipenem	7(11%)	1(3%)	6(50%)	4(40%)	1(14%)	1(33%)	1(100 %	0(0%)
Meropenem	5(8%)	1(3%)	6(50%)	3(30%)	2(29%)	0(0%)	0(0%)	0(0%)
Doripenem	4(6%)	2(6%)	2(17%)	1(10%)	1(14%)	--	0(0%)	0(0%)
Minocycline	8(13%)	8(24%)	2(17%)	1(10%)	1(14%)	0(0%)	0(0%)	0(0%)
Tigecycline	12(19%)	18(55%)	10(83%)	3(30%)	4(57%)	0(0%)	0(0%)	0(0%)

Klebsiella spp. showed maximum sensitivity for amikacin (41 %) followed by gentamicin (37 %). *Acinetobacter baumannii* showed maximum sensitivity for tigecycline (55 %) followed by gentamicin (24 %) and minocycline (24 %). *E. coli* showed maximum sensitivity for amikacin and tigecycline (83 %) followed by gentamicin (75 %)

Only 2 Gram positive isolates were obtained. *Staphylococcus aureus* was sensitive to Vancomycin, Linezolid, Teicoplanin and Rifampicin (100 %)

FIGURE 29: ANTIMICROBIAL SENSITIVITY PROFILE OF COMMON GRAM NEGATIVE RESPIRATORY ISOLATES

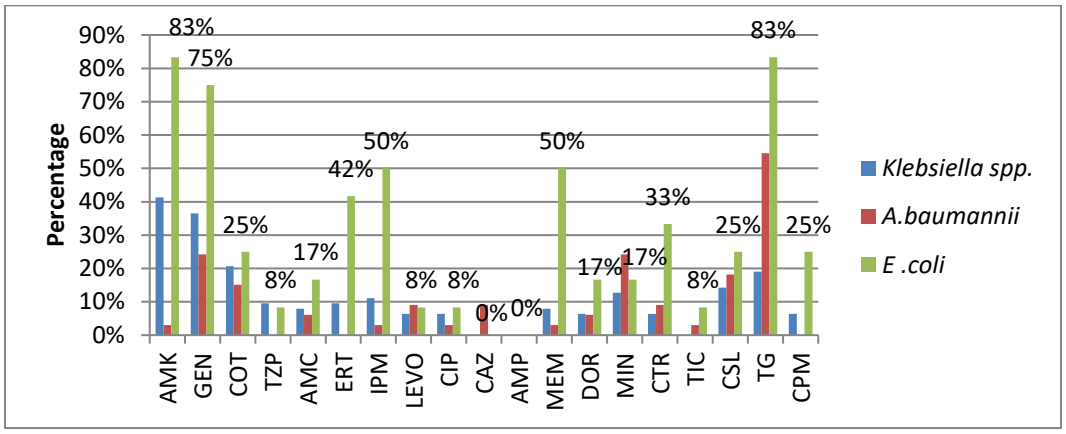
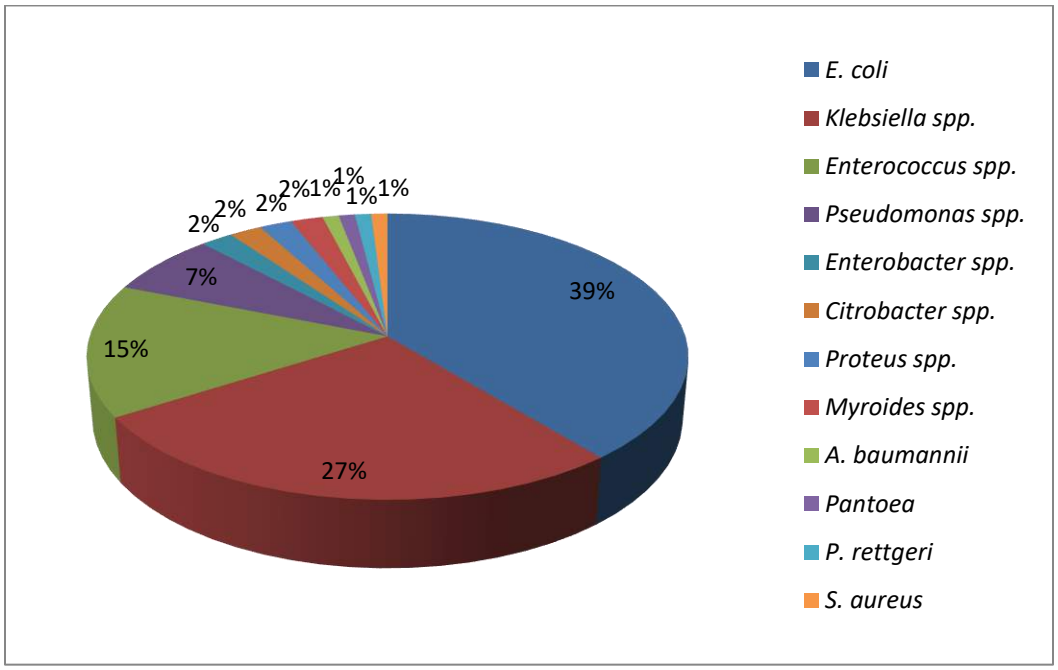


FIGURE 30: DISTRIBUTION OF URINARY ISOLATES (n=99)



Most common organism causing urinary tract infection was *E. coli* (39%) followed by *Klebsiella spp.* (27 %)

TABLE 32: ANTIMICROBIAL SENSITIVITY PROFILE OF GRAM NEGATIVE URINARY ISOLATES (n=83)

Antibiotics	***E. coli*** **(n=39)**	***Klebsiella spp.*** **(n=27)**	***Pseudomonas spp.*** **(n=7)**	***Acinetobacter spp.*** **(n=1)**	***Myroides*** **(n=2)**	***Proteus*** **(n=2)**	***Citrobacter*** **(n=2)**	***Enterobacter*** **(n=1)**	***Pantoea*** **(n=1)**	***Providentia*** **(n=1)**
Ticarcillin	6(15%)	--	1(14%)	0(0%)	--	2(100 %)	0 (0 %)	0(0%)	0(0%)	0(0%)
Amikacin	28(72%)	12(44%)	2(29%)	0(0%)	0(0%)	2(100 %)	1 (50 %)	1(100 %)	0(0%)	0(0%)
Gentamicin	17(44%)	9(33%)	3(43%)	0(0%)	0(0%)	2(100 %)	2 (100 %)	0(0%)	0(0%)	0(0%)
Cotrimoxazole	10(26%)	5(19%)	1(14%)	0(0%)	--	0(0%)	0 (0 %)	0(0%)	1(100 %)	0(0%)
Cephalothin	2(5%)	3(11%)	1(14%)	0(0%)	--	1(50 %)	0 (0 %)	0(0%)	0(0%)	0(0%)
Cefuroxime	5(13%)	4(15%)	1(14%)	0(0%)	--	2(100 %)	0 (0 %)	0(0%)	0(0%)	0(0%)
Ceftriaxone	0(0%)	4(15%)	1(14%)	0(0%)	--	1(50 %)	0 (0 %)	0(0%)	0(0%)	0(0%)
Ceftazidime	--	--	3(43%)	0(0%)	--	1(50 %)	1 (50 %)	0(0%)	0(0%)	0(0%)
Norfloxacin	1(3%)	5(19%)	2(29%)	0(0%)	0(0%)	2(100 %)	1 (50 %)	0(0%)	0(0%)	0(0%)

Ofloxacin	2(5%)	5(19%)	2(29%)	0(0%)	0(0%)	2(100 %)	0 (0 %)	0(0%)	0(0%)	0(0%)
Nitrofurantoin	20(51%)	3(11%)	1(14%)	0(0%)	--	1(50 %)	0 (0%)	0(0%)	0(0%)	0(0%)
Piperacillin-tazobactum	19(49%)	7(26%)	3(43%)	0(0%)	0(0%)	2(100 %)	1 (50 %)	0(0%)	0(0%)	0(0%)
Cefoperazone –sulbactum	17(44%)	9(33%)	4(57%)	0(0%)	1(50 %)	2(100 %)	2 (100 %)	1(100 %)	1(100 %)	0(0%)
Amoxiclav	13(33%)	6(22%)	--	--	--	2(100 %)	1 (50 %)	0(0%)	0(0%)	0(0%)
Ertapenem	20(51%)	6(22%)	--	--	--	2(100 %)	0(0%)	0(0%)	0(0%)	0(0%)
Imipenem	20(51%)	12(44%)	3(43%)	0(0%)	--	2(100 %)	1 (50 %)	0(0%)	0(0%)	0(0%)

E. coli showed maximum sensitivity for fosfomycin (87%) followed by amikacin (72 %)

Klebsiella spp. showed maximum sensitivity for fosfomycin (56 %) followed by Amikacin (44 %) and Imipenem (44 %)

Pseudomonas spp. showed maximum sensitivity for cefoperazone –sulbactum (57 %) followed by piperacillin –tazobactum (43 %) and ceftazidime (44 %)

FIGURE 31: ANTIMICROBIAL SENSITIVITY PROFILE OF COMMON GRAM NEGATIVE URINARY ISOLATES

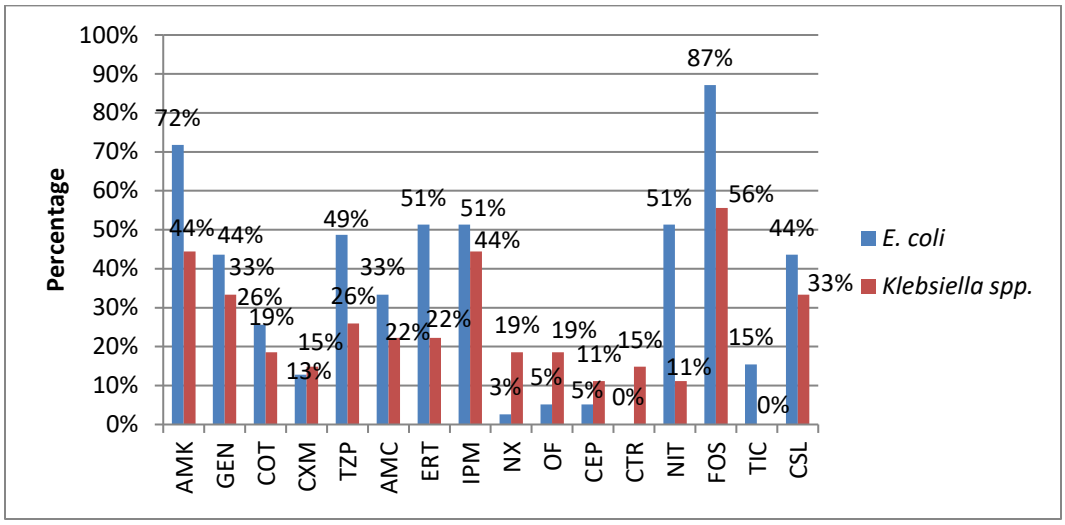


TABLE 33: ANTIMICROBIAL SENSITIVITY PROFILE OF GRAM POSITIVE URINARY ISOLATES (n=16)

Antibiotics	*Enterococcus spp.* (n=15)	*Staphylococcus aureus* (n=1)
Penicillin	3(20%)	1(100%)
Daptomycin	3(20%)	1(100%)
Ciprofloxacin	2(13%)	1(100%)
Levofloxacin	2(13%)	1(0%)
Gentamicin	2(13%)	1(100%)
Cotrimoxazole	2(13%)	1(100%)
Tetracycline	4(27%)	1(100%)
Rifampicin	2(13%)	1(100%)
Nitrofurantoin	2(13%)	1(100%)
Teicoplanin	9(60%)	1(100%)
Vancomycin	10(67%)	1(100%)
Lenezolid	12(80%)	1(100%)

Enterococcus spp. showed maximum sensitivity for linezolid (80 %) followed by vancomycin (67%)

FIGURE 32: ANTIMICROBIAL SENSITIVITY PROFILE OF GRAM POSITIVE URINARY ISOLATES (n=16)

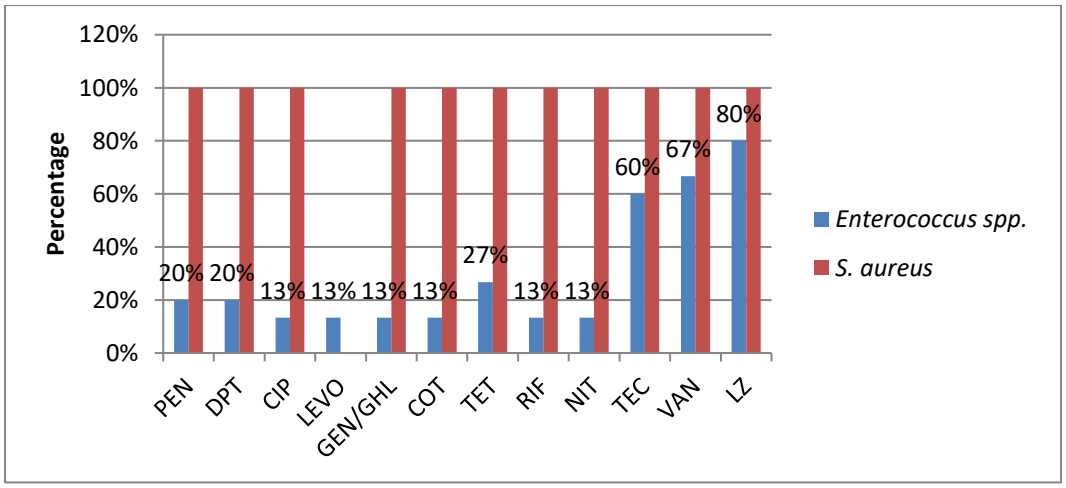
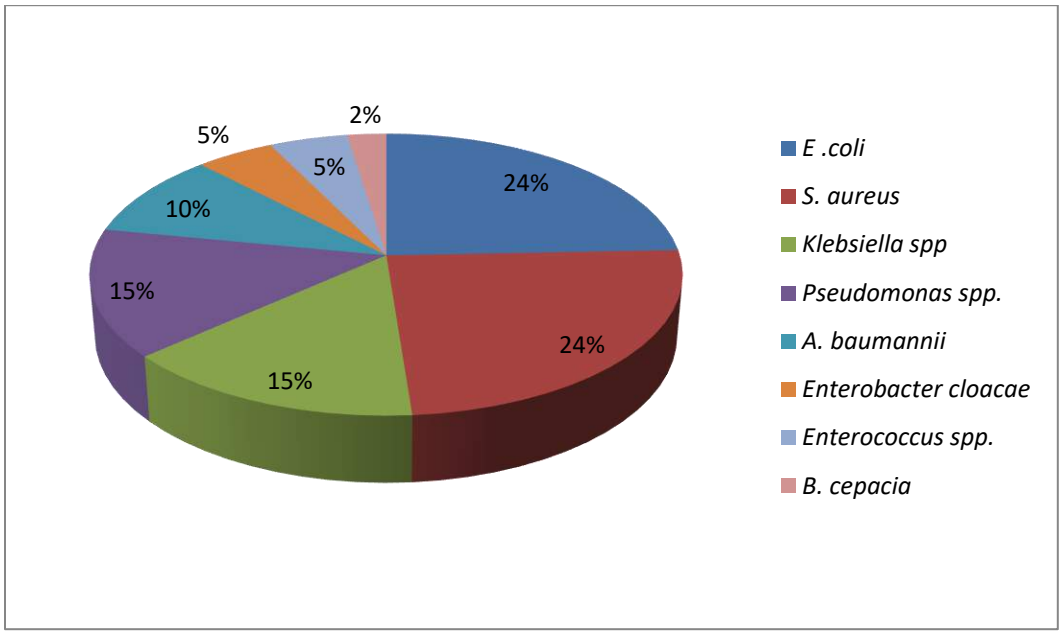


FIGURE 33: DISTRIBUTION OF SOFT TISSUE ISOLATES (n=41)



Most common organism causing soft tissue infection was *E. coli* (24%) and *Staphylococcus aureus* (24 %)

TABLE 34: ANTIMICROBIAL SENSITIVITY PROFILE OF GRAM NEGATIVE SOFT TISSUE ISOLATES (n=29)

Antibiotics	***E. coli* (n=10)**	***Klebsiella spp.* (n=6)**	***Pseudomonas spp.* (n=6)**	***Acinetobacter baumannii* (n=4)**	***Enterobacter spp.*(n=2)**	***Burkholderia cepacia* (n=1)**
Ampicillin	2(20%)	--	2(33%)	0(0%)	0(0%)	0(0%)
Ticarcillin	3(30%)	--	2(33%)	1(25 %)	0(0%)	0(0%)
Amikacin	7(70%)	2(33%)	5(83%)	1(25%)	1(50%)	0(0%)
Gentamicin	7(70%)	2(33%)	5(83%)	2(50%)	0(0%)	1(100%)
Cotrimoxazole	2(20%)	1(17%)	3(50%)	1(25%)	0(0%)	0(0%)
Ceftazidime	--	--	4(67%)	1(25%)	0(0%)	1(100%)
Cefepime	4(40%)	0%	4(67%)	1(25%)	0(0%)	0%
Levofloxacin	4(40%)	0%	3(50%)	1(25%)	0(0%)	1(100%)
Ciprofloxacin	--	--	3(50%)	1(25%)	0(0%)	0(0%)
Piperacillin-tazobactum	5(50%)	0%	3(50%)	1(25%)	0(0%)	1(100%)
Cefoperazone – sulbactum	5(50%)	0%	4(67%)	1(25%)	0(0%)	1(100%)
Amoxiclav	2(20%)	0%	--	--	0(0%)	0(0%)

Ertapenem	3(30%)	0%	--	--	0(0%)	0(0%)
Imipenem	3(30%)	1(17%)	2(33%)	0(0%)	0(0%)	0(0%)
Meropenem	4(40%)	0%	4(67%)	0(0%)	0(0%)	1(100%)
Minocycline	5(50%)	0%	2(33%)	2(50%)	0(0%)	0(0%)
Tigecycline	--	--	--	1(25%)	0(0%)	1(100%)

E. coli showed maximum sensitivity for amikacin and gentamicin (70 %)

Klebsiella spp. showed maximum sensitivity for amikacin and gentamicin (33 %)

Pseudomonas spp. showed maximum sensitivity for amikacin (83 %) and gentamicin (83 %).

FIGURE 34: ANTIMICROBIAL SENSITIVITY PROFILE OF COMMON GRAM NEGATIVE SOFT TISSUE ISOLATES

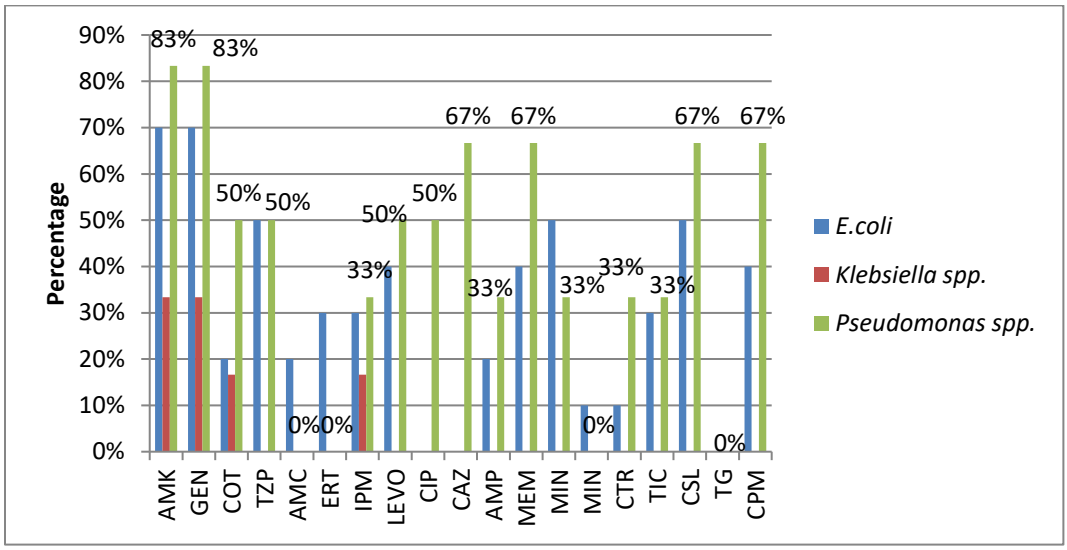
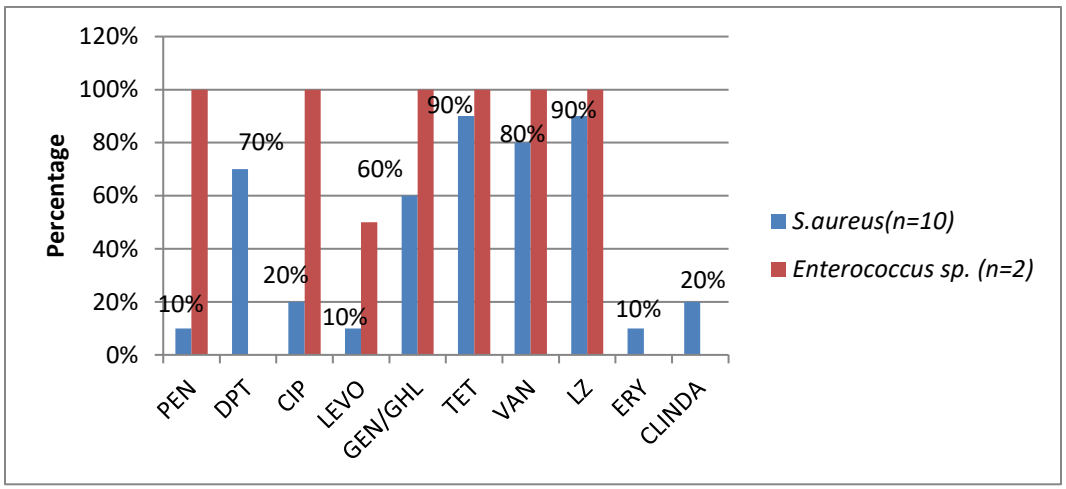


TABLE 35: ANTIMICROBIAL SENSITIVITY PROFILE OF GRAM POSITIVE SOFT TISSUE ISOLATES (n=12)

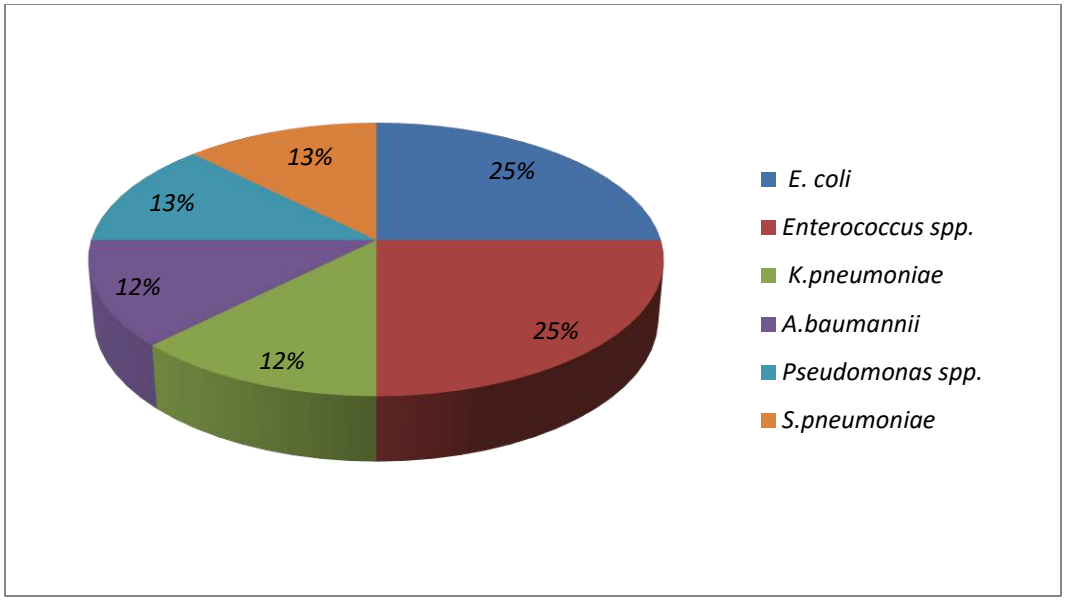
Antibiotics	*Staphylococcus aureus* (n=10)	*Enterococcus spp.* (n=2)
Penicillin	1(10%)	2(100%)
Daptomycin	7(70%)	0(0%)
Ciprofloxacin	2(20%)	2(100%)
Levofloxacin	1(10%)	1(50%)
Gentamicin	6(60%)	2(100%)
Tetracycline	9(90%)	2(100%)
Vancomycin	8(80%)	2(100%)
Linezolid	9(90%)	2(100%)
Erythromycin	1(10%)	0(0%)
Clindamycin	2(20%)	0(0 %)

FIGURE 35: ANTIMICROBIAL SENSITIVITY PROFILE OF GRAM POSITIVE SOFT TISSUE ISOLATES (n=12)



S. aureus showed maximum sensitivity for linezolid and tetracycline (90%)

FIGURE 36: DISTRIBUTION OF BODY FLUIDS ISOLATES (n=8)



Most common organism causing body fluid infection was *E. coli* (25%) and *Enterococcus spp*. (25%)

TABLE 36: ANTIMICROBIAL SENSITIVITY PROFILE OF GRAM NEGATIVE BODY FLUIDS ISOLATES (n=5)

Antibiotics	*E. coli* (n=2)	*Pseudomonas spp.*(n=1)	*Klebsiella spp.(*n=1*)*	*Acinetobacter spp.*(n=1)
Ampicillin	0(0%)	1(100%)	--	0%
Amikacin	2(100%)	0(0%)	0%	0%
Gentamicin	1(50%)	1(100%)	0%	0%
Cotrimoxazole	0(0%)	1(100%)	0%	100%
Cefuroxime	0(0%)	1(100%)	0%	0%
Ceftazidime	--	1(100%)	--	0%
Ceftriaxone	0(0%)	1(100%)	0%	--
Ciprofloxacin	0(0%)	1(100%)	0%	0%
Piperacillin/ tazobactum	1(50%)	1(100%)	0%	0%
Ertapenem	1(50%)	--	0%	--
Imipenem	1(50%)	1(100%)	0%	0%
Meropenem	0(0%)	1(100%)	0%	0%
Doripenem	0(0%)	1(100%)	0%	0%
Minocycline	0(0%)	1(100%)	0%	0%
Tigecycline	2(100%)	1(100%)	0%	0%

E. coli showed maximum sensitivity for amikacin and tigecycline (100%)
Streptococcus pneumoniae was sensitive to penicillin, levofloxacin, tetracycline, linezolid.

FIGURE 37: ANTIMICROBIAL SENSITIVITY PROFILE OF COMMON GRAM NEGATIVE BODY FLUIDS ISOLATES

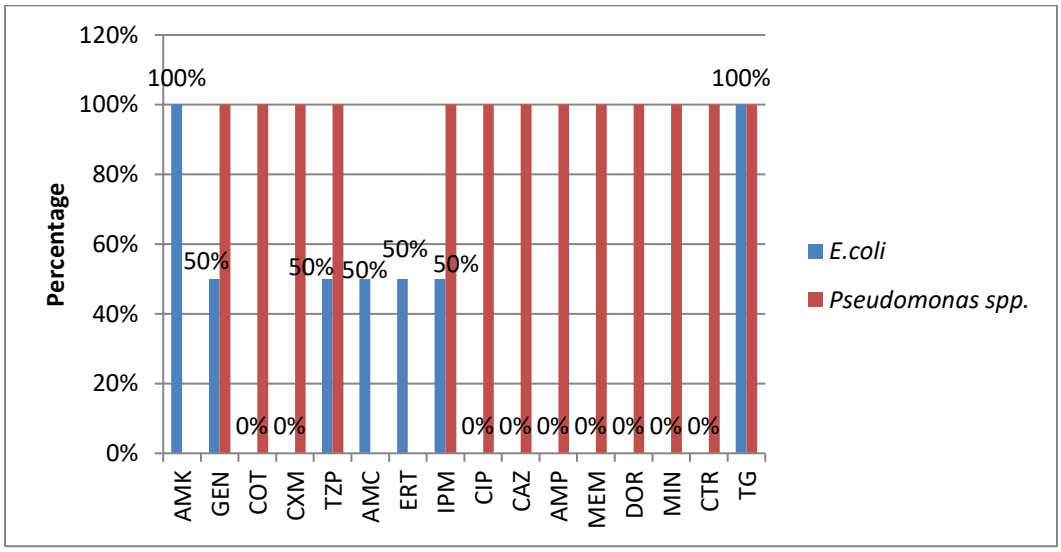
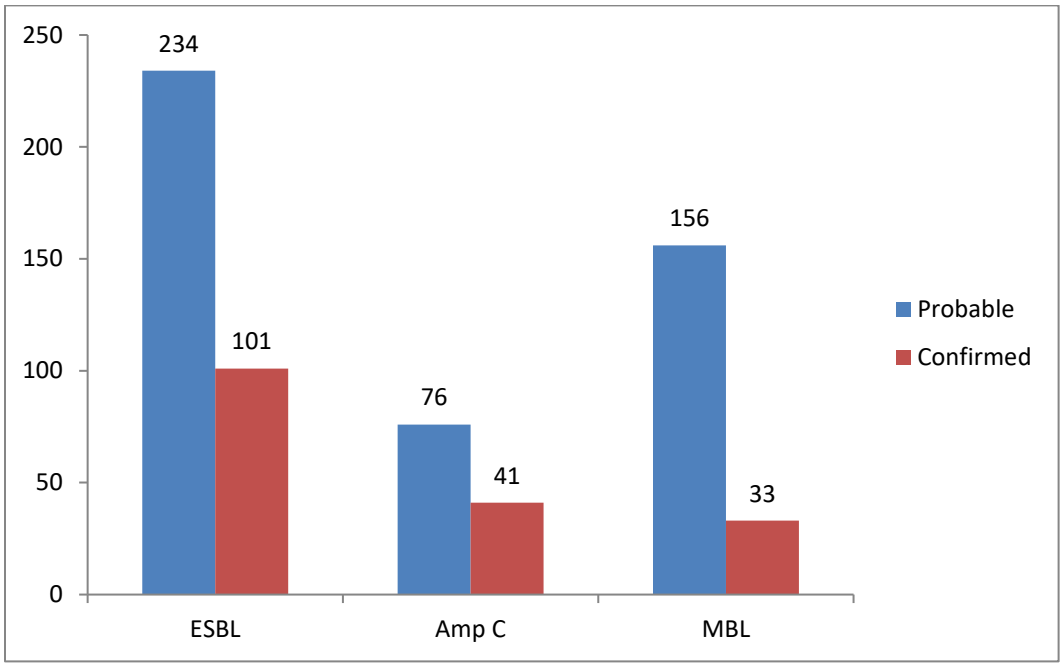


FIGURE 38: DRUG RESISTANCE MECHANISMS IN GRAM NEGATIVE ISOLATES (n=304)



Out of 304 Gram negative organisms, probable ESBL/ Amp C/ MBL producers were 234 (76.9 %) / 76 (25 %)/ 156 (53.1 %) respectively. Confirmed ESBL/Amp C/MBL producers were 101 (33.2 %),41 (13.4%),33 (10.8) respectively.

TABLE 37: DISTRIBUTION OF ESBL/AmpC/ MBL PRODUCERS AMONG GRAM NEGATIVE ISOLATES

Isolates (n=304)	ESBL n (%)	Amp C n (%)	MBL n (%)
Klebsiella spp.(n=113)	55 (48.6)	18(15.9)	4(3.5)
Acinetobacter baumannii (n=47)	30(37.5)	14 (29.7)	9(19.1)
E. coli (n=80)	13(27.6)	8(10)	11(13.7)
Pseudomonas spp. (n=27)	2(7.4)	1(3.7)	8(29.6)
Enterobacter spp. (n=10)	1(10)	--	--
Others (n=27)	--	--	1(3.7 %)

*Klebsiella spp. (*48.6%) *was* common ESBL producer followed by *Acinetobater baumannii* (37.5 %)

Acinetobacter baumannii(29.7 %) *was* common AmpC producer followed by *Klebsiella. spp.*(15.9 %)

Pseudomonas spp. (29.6 %) was common MBL producer followed by *Acinetobacter baumannii*(19.1 %)

FIGURE 39: DISTRIBUTION OF ESBL/Amp C/ MBL PRODUCERS AMONG GRAM NEGATIVE ISOLATES

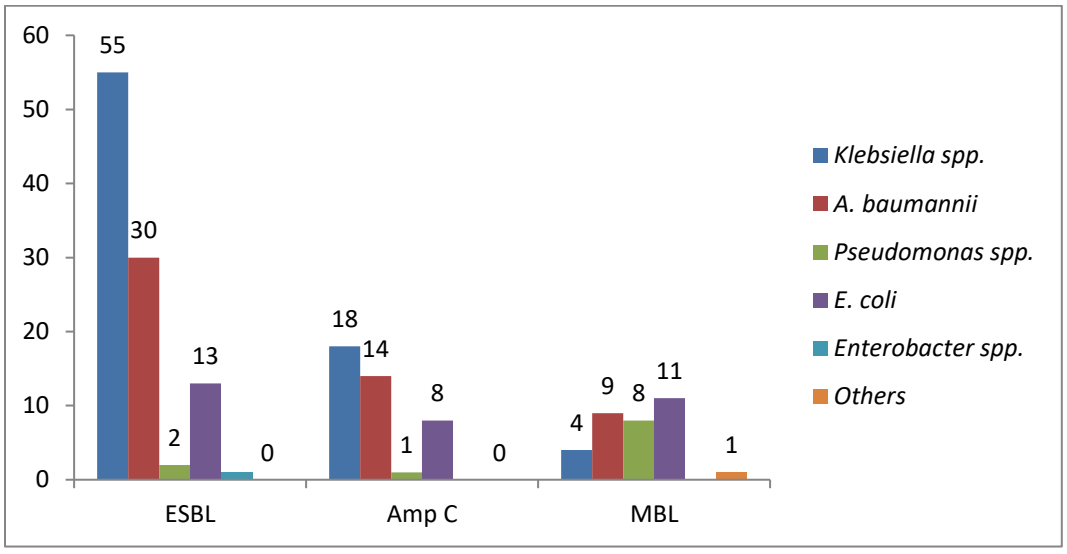


TABLE 38: COMPARISON OF ANTIMICROBIAL RESISTANCE PATTERN AMONG ESBL PRODUCERS AND NON ESBL PRODUCERS(n=304)

Antimicrobial agents	ESBL Producers101 n (%)	Non-ESBL Producers 203 n (%)	P-value
Amikacin	62(61.3)	92(45.3)	0.008
Gentamicin	81(80.1)	145(71.4)	0.009
Cefepime	96(95.0)	150(73.8)	0.000
Ciprofloxacin	94(93)	159(78.3)	0.000
Cotrimoxazole	94(93)	151(74.3)	0.000
Piperacillin/tazobactam	91(90.1)	159(78.3)	0.011
Imipenem	96(95)	144(70.9)	0.000
Meropenem	99(98)	147(72.4)	0.000
Tigecycline	43(42.5)	47(23.1)	0.000

On comparing the resistance pattern in ESBL / non ESBL producers, significant difference in the resistant pattern was observed for aminoglycosides, cefepime, fluoroquinolones, cotrimoxazole, piperacillin/tazobactam, carbapenems and tigecycline. The difference in resistance was statistically significant ($p<0.05$)

TABLE 39: COMPARISON OF ANTIMICROBIAL RESISTANCE PATTERN AMONG AmpC PRODUCERS AND NON AmpC PRODUCERS (n=304)

Antimicrobial Agents	AmpC Producers 41 n (%)	Non-AmpC Producers 263 n (%)	P -value
Amikacin	29(70.7)	118(44.8)	0.002
Gentamicin	37(90.2)	185(70.3)	0.007
Cefepime	38(92.6)	200(76)	0.016
Ciprofloxacin	38(93.6)	209(79.4)	0.043
Cotrimoxazole	36(87.8)	203(77.1)	0.123
Piperacillin/tazobactam	38(92.6)	207(78.7)	0.035
Imipenem	37(90.2)	194(73.7)	0.022
Meropenem	37(90.2)	200(76)	0.041
Tigecycline	17(41.5)	24(24.7)	0.0001

AmpC producers were highly resistant to gentamicin, cefepime, piperacillin/tazobactam, imipenem, meropenem and tigecycline than non-AmpC producers and the difference was statistically significant. ($p<0.05$)

TABLE 40: COMPARISON OF ANTIMICROBIAL RESISTANCE PATTERN AMONG CARBAPENEMASE (MBL) PRODUCERS AND NON MBL PRODUCERS (n=304)

Antimicrobial agents	MBL Producers 33 n (%)	Non-MBL Producers 271 n (%)	P-value
Amikacin	27(81.8)	118(43.5)	0.000
Gentamicin	30(90.9)	194(71.5)	0.017
Cefepime	33(100)	200(73.8)	0.002
Ciprofloxacin	33(100)	216(79.7)	0.013
Cotrimoxazole	33(100)	205(75.6)	0.003
Piperacillin/tazobactam	31(93.9)	216(79.7)	0.048
Tigecycline	20(60.6)	54(23.6)	0.000

Carbapenemase producers showed higher resistance to amikacin, cotrimoxazole, cefepime and tigecycline than non carbapenemase producers and the difference was statistically significant($p<0.05$)

DRUG RESISTANCE IN GRAM POSITIVE ISOLATES

TABLE NO 41: RESISTANCE PATTERN AMONG GRAM POSITIVE ISOLATES

Isolates	Resistance pattern	n (%)
S.aureus (n=29)	MRSA	16 (55.1 %)
Enterococcus spp. (n=25)	VRE	2 (8 %)

Out of 29 isolates of *Staphylococcus aureus* 16 (55.1 %) were methicillin resistant (MRSA)

Out of 25 isolates of *Enterococcus* 2 (8 %) were vancomycin resistant (VRE). *Streptococcus pneumoniae* and *Streptococcus agalactiae* did not show any resistance pattern.

CHARACTERISATION OF ISOLATES INTO MDR/ XDR/ PDR

TABLE 42: DISTRIBUTION OF MDR /XDR /PDR IN BACTERIAL ISOLATES (n=360)

Number Of MDR/XDR/PDR	Number Of Cases	Percentage
MDR	247	69 %
XDR	191	53 %
PDR	0	0 %

Out of 360 bacterial isolates, 247 (69 %) were multidrug resistant, 191 (53 %) were extensively drug resistant

FIGURE 40: DISTRIBUTION OF MDR /XDR /PDR IN BACTERIAL ISOLATES

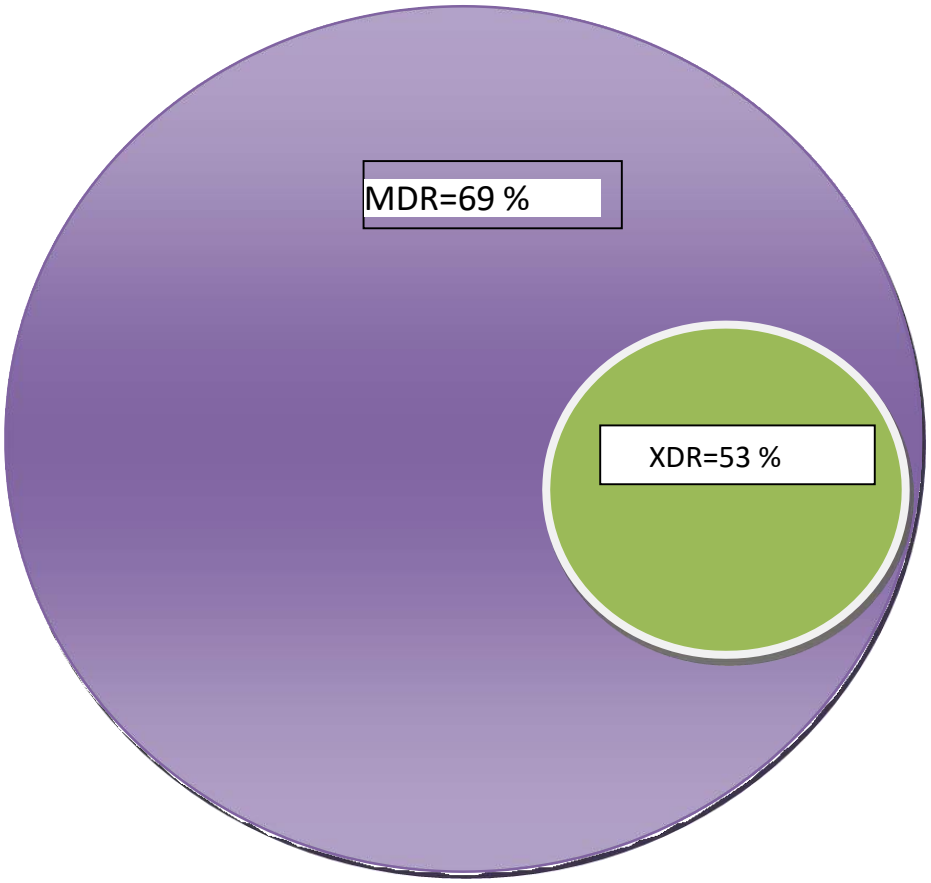


TABLE 43: TOTAL NUMBER OF ADMITTED PATIENTS ON DEVICES (n=1039)

Devices	Number of patients on devices	Device days	Mean device days
Mechanical Ventilation	362	1799	4.9
Urinary Catheter	825	5829	7.1
Central line	342	2420	7.1

TABLE 44: DEVICE RELATED INFECTIONS IN PATIENTS (n=5)

Device Related Infections	Number
VAE (PVAP + VAP)	2 +1
CLABSI	1
CAUTI	1
Total	5

Most common device related infection was VAE

TABLE 45: OVERALL DISTRIBUTION OF ISOLATES IN DEVICE ASSOCIATED INFECTIONS(n=5)

Device associated infections	Isolates	Number (%)
VAE	*Klebsiella pneumoniae* *Pseudomonas aeruginosa*	2 (40 %) 1 (20 %)
CAUTI	*Enterococcus faecium*	1 (20 %)
CLABSI	*Candida tropicalis*	1 (20 %)

Out of 5 device associated infections, most common organism isolated was *Klebsiella pneumoniae* (40 %)

TABLE 46: DEVICE ASSOCIATED INFECTION RATES

Rate	Value
Overall device associated infection rate	0.5
VAP (per 1000 ventilator days)	1.66
CAUTI (per 1000catheter days)	0.17
CLABSI (per 1000 central line days)	0.41
Incidence rate (per 1000 ICU days)	39.3
Attack rate (cumulative incidence rate)	28.6

Total device associated infections = 5

Total device days=10,048

Total VAP cases-3, Total ventilator days -1799

Total CAUTI cases-1, Total catheter days -5829

Total CLABSI cases-1, Total central line days -2420

Total infections-298, Total number ofICUdays-10,121

Total number of ICU admissions-1039

The VAP rate was 1.66 per 1000 ventilator days. CAUTI rate was 0.17 per 1000 catheter days. CLABSI rate was 0.41 per 1000 central line days,

The incidence rate of infections was---39.3 per 1000 ICU days while the attack rate (cumulative incidence rate) of infections was 28.6

TABLE 47: HOSPITAL VS COMMUNITY ACQUIRED INFECTIONS

Parameters	Hospital acquired infections	Community acquired infections	P value
Mean Age	15.51	17.25	0.467
Mean Apache score	14.2	14.4	0.597
Sex –	n=105	n=185	
Male	62 (59.0 %)	121(65.4%)	0.281
Female	43 (40.9 %)	64 (34.5%)	
Comorbidity	n=105	n=185	
Yes	67(63.8 %)	117 (63.2 %)	0.923
No	38 (36.1 %)	68 (36.7 %)	
Infections	n=122	n=222	
BSI	28 (22.9 %)	51(22.9%)	
RTI	52(42.6%)	70(31.5 %)	0.187
UTI	26(21.3 %)	71(31.9 %)	
STI	13(10.6 %)	26 (11.7 %)	
BFI	3(2.4%)	4(1.8 %)	
	n=131	n=229	
Gram negative-	117 (86.6 %)	187(80.9 %)	0.187
Gram positive-	14(10.3 %)	42(18.1%)	
Predominant isolates	n=131	n=229	
Klebsiella spp.	32(24.4%)	81(35.4%)	0.031
E. coli	10(7.6%)	70(30.6%)	0.000
Pseudomonas spp.	25(19.1%)	2(.9%)	0.000
A.baumannii	30(22.9%)	17(7.4%)	0.118
S. aureus	7(5.3%)	22(9.6%)	0.152
	n=131	n=229	
MDR	86 (65.6 %)	161(70.3 %)	0.054
XDR	68 (51.9%)	123 (53.7%)	0.742
	n=117	n=187	
ESBL	35 (29.9%)	66 (35.2 %)	0.387
Amp C	22 (18.8%)	19 (10.1 %)	0.874
MBL	10 (8.5%)	23 (12.2 %)	0.992
Outcome -			
Recovered	51	93	0.333
DAMA	34	57	0.533
Expired	20	35	0.218

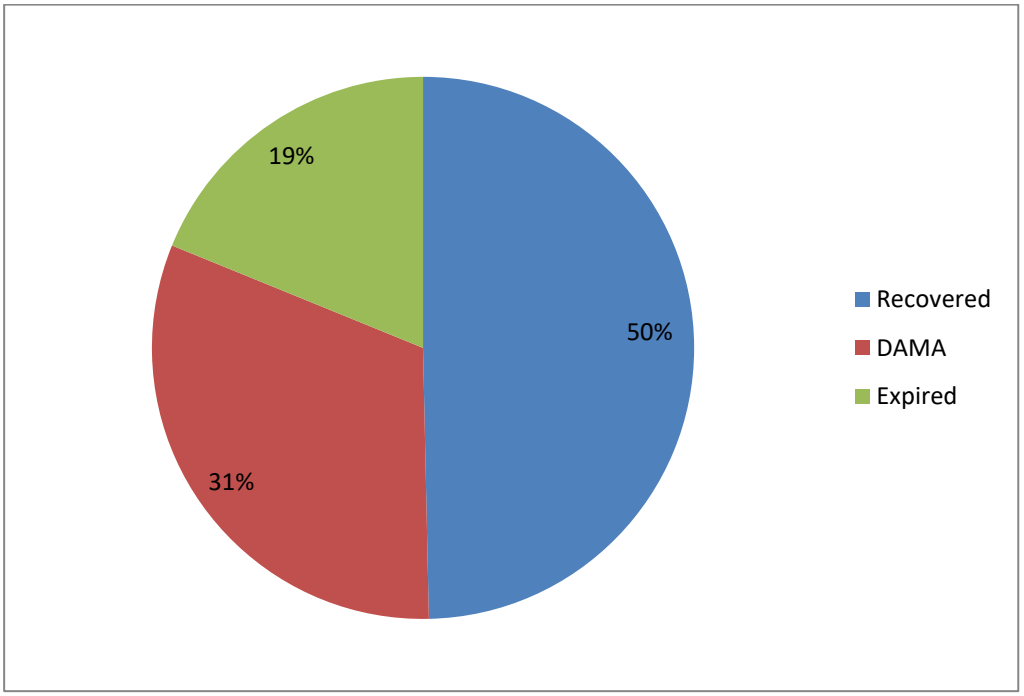
On comparing hospital and community acquired infections, predominant isolates (*Klebsiella spp., E. coli, Pseudomonas spp.*) and MDR difference was statistically significant (P value <0.05)

TABLE 48: OUTCOME OF PATIENTS WITH INFECTIONS (n=298)

Outcome	Number of patients (n)	Percentage (%)
Recovered	146	50
DAMA	92	31
Expired	60	19

Out of 298 patients, 146 (50%) recovered, 92 (31%) were discharged against medical advice (DAMA) and 60 (19%) expired.

FIGURE 41: OUTCOME OF PATIENTS WITH INFECTIONS (n=298)



DISCUSSION

This prospective study was conducted in the Department of Microbiology, Dayanand Medical College and Hospital, Ludhiana. Over a period of one year (1st January 2020 to 31st December 2020), 1039 patients were admitted in medical ICU and infections were present in 298 patients with a infection rate of 28.6%. Out of 298 patients, 2 patients had pulmonary tuberculosis, 13 patients had fungal infection (7 patients had both fungal and bacterial infection and 6 patients had only fungal infection) and 290 patients had bacterial infection.

In our study, majority of patients with infections (n=298) were in the age group of 61-70 years followed by 51-60 years and 55.9, standard deviation was 16.6. Majority of patients were males (63 %) as compared to females (37%).

In this study majority of isolates were Gram negative (84 %) as compared to Gram positive (16 %) similar to data reported from other parts of the world[88] which differs from the study conducted by Lola et al.[89] who demonstrated equal frequencies of Gram-positive cocci and Gram-negative bacilli from the culture results, whereas Gram-positive organisms were noted predominantly in Michalopoulos et al. study.[90] Our profile was similar to what has been observed in the EPIC study[14] and the EPIC II study.[53]

74 % of infections were community acquired and 26 % were hospital acquired. Most common type of hospital acquired infections were respiratory tract infections (42.6%) followed by blood stream infections (23%). This was similar to the results of Azzam and Dramaix[78] and El-Hagrassy,[81] where VAPs were the most common among the HAIs, while a report from Abha, Saudi Arabia, documented UTIs as the most common HAI.[91]

Majority of infections were respiratory tract (35.5%) followed by urinary tract infections (28.2%), blood stream infection (23%) similarity to the reports for ICU infection in China[92] European[93,94] and

Malaysian[95]which is contrary to the study conducted by Lola et al.[89] BSI accounted for 30%, UTI for 26.7%, and LRTI for 13.3%.

Majority of isolates obtained from respiratory samples were Gram negative (98.4%) similar to Kumari et al*.,* Okesola and Ige and Goel *et al*.[96-98] The most common Gram negative organism isolated from respiratory samples was *Klebsiella pneumoniae* (48%), followed by *Acinetobacter baumannii* (25%) similar with the findings of Harris et al., 2019[99] who also showed *Klebsiella spp*. as the most common organism which differs from the study done by Goel et al. where *Pseudomonas* (35%) was the most common Gram negative organism in respiratory samples followed by *Acinetobacter baumannii,*[100] Other Gram negative bacteria isolated were *E. coli, Pseudomonas spp., Acinetobacter baumannii, Enterobacter spp., Burkholderia cepacia, Proteus spp., Sphingomonas paucimobilis.*

In the present study among respiratory samples, *Klebsiella pneumoniae* and *Acinetobacter baumannii* showed high level of resistance toward third generation cephalosporins, ciprofloxacin, cotrimoxazole, our findings are similar with other studies.[101,102,97]

Among the urine samples the most common Gram negative organism isolated was *E coli* (39 %) followed by *Klebsiella pneumoniae* (27%), similar with study done by Hidron AI et al.[103] who also reported *E coli*, as most common isolate. Other Gram negative bacteria isolated was *Klebsiella spp, Pseudomonas spp., Citrobacter spp., Myroides spp, Proteus spp., Acinetobacter baumannii, Enterobacter spp., Pantoea spp., Providentia rettgeri.*

Maximum resistance was observed toward norfloxacin, ofloxacin, third generation cephalosporins, consistent with the findings of other studies.[104-108]

Among the blood samples the most common Gram negative organism isolated was *E. coli* (21 %), similar with study done by Zaveri et al.[109] who also reported *E. coli* as most common isolate obtained from blood, which differs from the study made by Svenja J et al. (24.3%)[110] which showed *Klebsiella pneumoniae* was the most commonly

isolated organism followed by *Acinetobacter baumannii* and *Escherichia coli*. This differs from studies by Mehta et al.[111] in which *Acinetobacter baumannii* and *Pseudomonas aeruginosa* were the commonest Gram negative isolates. Other Gram negative bacteria isolated was *Klebsiella pneumoniae, Acinetobacter baumannii, Pseudomonas spp, Burkholderia cepacia, Citrobacter spp., Acromobacter xyloxidans, Stenotrophomonas maltophilia, Sphingomonas paucimobilis, Alcaligenes faecalis, Elizabethkingia meningoseptica, Serratia liquefaciens.*

In our study *Escherichia coli* was susceptible to amikacin (88%) while low susceptibility was seen to amoxyclavulanic (35%) cephalosporins (18 %), amipicillin (12%). These results were in accordance with the study by Gupta et al.[112]

Among the body fluid samples the most common Gram negative organism isolated was *E coli* (25 %) followed by *Klebsiella pneumoniae* (12 %), and among Gram-positive, *Enterococcus spp*. (25 %) was most common This finding was similar to studies done by Rouf and Nazir Deb *et al*. and Harshika *et al*. study[113-115] who also reported *E. coli* as most common isolate obtained from body fluid. Other Gram negative organisms isolated was *Acinetobacter spp*, *Pseudomonas spp.*

Antimicrobial susceptibility pattern among the Gram-negative organisms showed that *E. coli* was highly sensitive to amikacin (100%) followed by meropenem (50%) and was found to be highly resistant to cephalosporins and fluoroquinolones, findings are similar with study done by Barai et al.[116]

Among the soft tissue samples the most common organism isolated was *E. coli* (24%) followed by *Staphylococcus aureus* (24%),this finding was similar to studies done in India[117,68] and outside [118,119] and differs from study of Kaftandzieva et al and Guembe et al.[120,121] Other Gram negative bacteria isolated was *Klebsiella pneumoniae* ,*Pseudomonas spp., Acinetobacter baumannii, Burkholderia cepacia, Enterobacter spp*. Antimicrobial susceptibility pattern among the

Gram-negative organisms showed that *E. coli* was highly sensitive to amikacin (70%) and was found to be highly resistant to cephalosporins (70%) and fluoroquinolones (60%),findings are similar to other studies[122-124]

In the present study, ESBL production was 33.2%. Similar findings were reported by various authors where ESBL production was ranged from 19.6-40 %[125]in contrast to study done by Harakuni et al. who reports a high prevalence of ESBLs (74%) in ICU Patients.[126] In present study highest production of ESBL production was seen in *K.spp (*48.6%) *followed by Acinetobacter spp*. (37.5%), similar with result obtained by various authors.[127]In contrary to the study, Oberoi et al reported *E. coli* (56.2%), the major ESBL producer, followed by *Pseudomonas* (18.7%) and *Klebsiella* (15.6%).[125]

In the present study, AmpC production was seen in 13.4 % isolates as compared to other studies which reported 14.8 %, 17.3 % and 22 % of the AmpC producers.[128,129] In the present study Amp C production was highest in *Acinetobacter baumannii* (29.7%), followed by *Klebsiella spp* (15.9%), similar with the study done at Karnataka showed 43.5 % of *Acinetobacter spp*. as Amp C producers,[130] whereas Subha et al. founded maximum Amp C beta lactamases production in *Klebsiella* (24.1%) and *E coli* (37%).[131]

In the present study, MBL production was 10.8%. The highest incidence of MBL was seen in *Pseudomonas spp.* (29.6%) followed by *Acinetobacter baumannii* (19.1%). Our findings were in concordance with the study which was done by Bandekar et al., who reported 15.7% MBL producers.[128] Our study differs from studies conducted in different countries which showed the rates of MBL production to be ranging from 13.4 to 61.5% for *E. coli* and 33–36% for *K. pneumoniae*[132-134] These resistance patterns are mainly due to heavy antibiotic use and increasing antibiotic resistance.

On comparing the resistance pattern in ESBL/non-ESBL producers, ESBL producers were resistant to aminoglycosides, cefepime, fluoroquinolones, cotrimoxazole, piperacillin/tazobactam,

carbapenems and tigecycline. The difference in resistance was statistically significant similar to other studies reported in literature.[135,136]

AmpC producers were highly resistant to gentamicin, cefepime, piperacillin/tazobactam, imipenem, meropenem and tigecycline and the difference was statistically significant similar with the findings of various authors.[133,137] Carbapenemase producers showed higher resistance to amikacin, cotrimoxazole, cefepime and tigecycline than non carbapenemase producers and the difference was statistically significant.

In our study, 247 isolates i.e 56 % were multidrug resistant, 199 isolates i.e 44% were extensively drug resistant and in our study no isolate was Pandrug resistant, this is in contrast to other studies where 34.2% and 73.9% isolates were multi drug resistant.[136,138]

In our study, device associated infections were 5. Out of total 5 cases, 3(60%) were Gram negative bacteria,1(20%) was yeast like fungi and 1(20 %) was Gram positive bacteria. Out of 5, most common was *Klebsiella pneumoniae (40%)*, *Pseudomonas aeruginosa (20%), Candida tropicalis (20%)*, *Enterococcus faecium (20%).* Similar results were found in previous studies.[139-141] Frequently detected isolate in device associated nosocomial infections was *Klebsiella pneumonia*e (26%) followed by *Acinetobacter baumannii* (19%) and *Pseudomonas aeruginosa* (16%). Contrary to our findings, the high percentage of *Acinetobacter baumannii* infections in hospitals in Greece and Italy and in another Polish centre and is epidemic in its character.[142-144]

Rate of VAP, CAUTI, CLABSI in our study was 1.66, 0.17, 0.41 per 1000 device days respectively. Our findings showed lower rates compared to the INICC Malaysia report 2016.[145] for VAP (1.66 vs 21) and CAUTI (0.17 vs 5) and CLABSI (0.41 vs 9.4). Overall, DA-HAIs rates results are much lower than the participating NHSN report.[146] ICUs: for VAP 1.66 versus 4; for CLABSI, 0.41 versus 3 and for CAUTI, 0.17 versus 3.2 infections per 1000 device days.

Most common age group involved in hospital and community acquired infections is between 61-70 years this is in accordance to the earlier studies and in community based studies in Finland, the rate increased over 50 years.[147]

Most common type of hospital acquired infections were respiratory tract infections (41.3%) followed by blood stream infections (25.4%) which is in contrast to study of ICUs, which was part of the INICC involving seven Indian cities where BSI was most common HAI.[148]

In our study VAP rate was 1.66 per 1000 ventilator days which is similar to a report, which included data from 50 counties the VAP incidence ranged between 0.9 and 13.1 per 1000 ventilator days.[149]

Most common organism causing respiratory tract infection in hospital acquired infections was *Acinetobacter baumanni* (36.2%) followed by *Klebsiella spp.* (34.5%) which in in similar to a study from Poland which also reported *A. baumannii* (41%) as the leading cause of ICU-acquired pneumonia.[150]

Most common organism causing blood stream infection in hospital acquired infection was *Klebsiella spp.* (17.2%) and *Acinetobacter baumanni* (17.2%) which is similar to a study from India which revealed that *Klebsiella* spp. (19.6%), *Pseudomonas* spp. (11.9%) were the most frequently isolated organisms from patients with HA-BSI.[151]

At present, systemic fungal infections constitute a major problem in intensive care units in both developed and developing nations. Candida spp. was found to be the most common, accounting for 8-15% of nosocomial blood stream infections and the fourth most common isolate of patients of the intensive care unit.[152] similar to our study where candidemia was predominant fungal infection.

With increased burden of infections and antimicrobial resistance, it has become difficult for healthcare administrations and infection control committees to reach the goal for elimination of intervals. However, by practicing sound and healthy ways for care delivery designed by infection control committees, controlling transmission of

these infections using appropriate methods for antimicrobial use, the resistance in emerging pathogens against antimicrobials can be reduced easily.

SUMMARY AND CONCLUSION

- This prospective study was conducted in the Department of Microbiology, Dayanand Medical College and Hospital, Ludhiana. Over a period of one year (1st January 2020 to 31st December 2020), 1039 patients were admitted in medical ICU. On the basis of clinical suspicion, various samples (respiratory, urine, blood, body fluid, soft tissue) were collected and they were processed as per standard protocol.
- Maximum number of admitted patients (n=1039) were from the age group of 61-70 years followed by 51-60 years. Mean age of admitted patients= 55.1, Standard deviation =17.7.
- Majority of admitted patients were males (62%) as compared to females (38%).
- Infections were present in 298 patients with a infection rate of 28.6 %
- Majority of patients with infections (n=298) were in the age group of 61-70 years followed by 51-60 years and 55.9, standard deviation was 16.6.
- Majority of patients with infections were males (63%) as compared to females (37%).
- Out of 298 patients, 189 were having comorbidities. Most of the patients were diabetic (25.5 %) followed by hypertension (10.7 %).
- Most common risk factor was sepsis present in 24.8 % of cases.
- Out of 298 patients, 2 patients had pulmonary tuberculosis, 13 patients had fungal infection and 290 patients had only bacterial infection.
- Most common fungal infection was candidemia followed by respiratory tract infection.
- Candida isolates shows 66.6 % susceptibility to Fluconazole, Flucytosine, Voriconazole, Caspofungin and Amphotericin B.
- Total 344 bacterial infections were characterized and 360 isolates were obtained. Out of the 360 isolates, 304 (84%) were

Gram negative isolates, 56 (16%) were Gram positive isolates.

- Most common type of infections were respiratory tract infections (35%) followed by urinary tract infections (27.7%).
- 74 % of infections were community acquired and 26 % were hospital acquired.
- Most common type of hospital acquired infections were respiratory tract infections (42.6%) followed by blood stream infections (23.0%) and most common type of community acquired infections were urinary tract infections (32%) followed by respiratory tract infections (31.5%).
- Most common organism isolated was *Klebsiella spp.* (31.4%) followed by *E. coli* (22.2%) and *Acinetobacter baumannii* (13.06%) and in Gram positive organism *Staphylococcus aureus* was most common (52%) followed by *Enterococcus spp.* (44%).
- Most common organism causing community acquired infection was *Klebsiella spp*. (35.4%) followed by *E. coli* (30.6%) and most common organism causing hospital acquired infection was *Klebsiella spp.* (24.4%) followed by *Acinetobacter baumannii* (22.9%) and *Pseudomonas spp*. (19.1%).
- Gram negative isolates showed low susceptibility to Ampicillin (5.2%), Ciprofloxacin (8.5%), while isolates were highly susceptible to Amikacin (46.3%), Gentamicin (39.4%), cefoperazone/sulbactam (33.5%) whereas Gram positive isolates showed low susceptibility to Clindamycin (5.5%), Levofloxacin (16.6%), Penicillin (22.2%), Erythromycin (22.2%). High sensitivity was seen for Linezolid (75.9%), Tetracycline (57.4%), Vancomycin (68.5%), Gentamicin (50%).
- Most common organism causing blood stream infection was *E coli* (21%) followed by *Klebsiella spp*. (20%) and *Staphylococcus aureus* (20%) and *E. coli* shows maximum susceptibility to Amikacin (88%), Gentamicin (71%).
- Most common organism causing respiratory tract infection was *Klebsiella spp.* (48%) followed by *Acinetobacter baumannii*

(25%) and *Klebsiella spp.* showed maximum sensitivity for amikacin (41%) followed by gentamicin (37%).

- Most common organism causing urinary tract infection was *E. coli* (39%) followed by *Klebsiella spp.* (27%) and *E. coli* showed maximum sensitivity for fosfomycin (87%) followed by amikacin (72 %).
- Most common organism causing soft tissue infection was *E. coli* (24%) and *Staphylococcus aureus* (24%) and *E. coli* showed maximum sensitivity for amikacin and gentamicin (70%).
- Most common organism causing body fluid infection was *E. coli* (25%) and *Enterococcus spp*. (25%) and *E. coli* showed maximum sensitivity for amikacin and tigecycline (100%).
- Out of 304 Gram negative organisms, probable ESBL/ Amp C/ MBL producers were 234 (76.9%) / 76 (25%)/ 156 (53.1%) respectively whereas confirmed ESBL/Amp C/MBL producers were 101 (33.2%), 41 (13.4%), 33 (10.8%) respectively.
- Common ESBL producers were *Klebsiella pneumoniae* (48.6%) and *Acinetobater baumannii* (37.5%). Common AmpC producers were *Acinetobacter baumannii* (29.7%) and *Klebsiella pneumoniae* (15.9%). Common MBL producers were *Pseudomonas aeruginosa* (29.6%) and *Acinetobacter baumannii* (19.1%).
- Out of 29 isolates of *Staphylococcus aureus* 16 (55.1%) were methicillin resistant (MRSA) and out of 25 isolates of *Enterococcus spp.* 2 (8%) were vancomycin resistant (VRE).
- Out of 360 bacterial isolates, 247 (69%) were multidrug resistant, 191 (53%) were extensively drug resistant.
- Most common device related infection was VAE. Out of total 5 device related infections, 3 (60%) were Gram negative bacteria, 1 (20%) was yeast like fungi and 1 (20%) was Gram positive bacteria. Most common organism isolated was *Klebsiella spp.* (40%).

- VAP rate 1.66 was per 1000 central line days, CAUTI rate was 0.17 per 1000 catheter days, CLABSI rate was 0.41 per 1000 central line days, Incidence rate of infections was 28.8 per 1000 ICU days, Attack rate (cumulative incidence rate) of infections was 28.6.
- Out of 298 patients, 146 (50%) recovered, 92 (31%) were discharged against medical advice (DAMA) and 60 (19%) expired.

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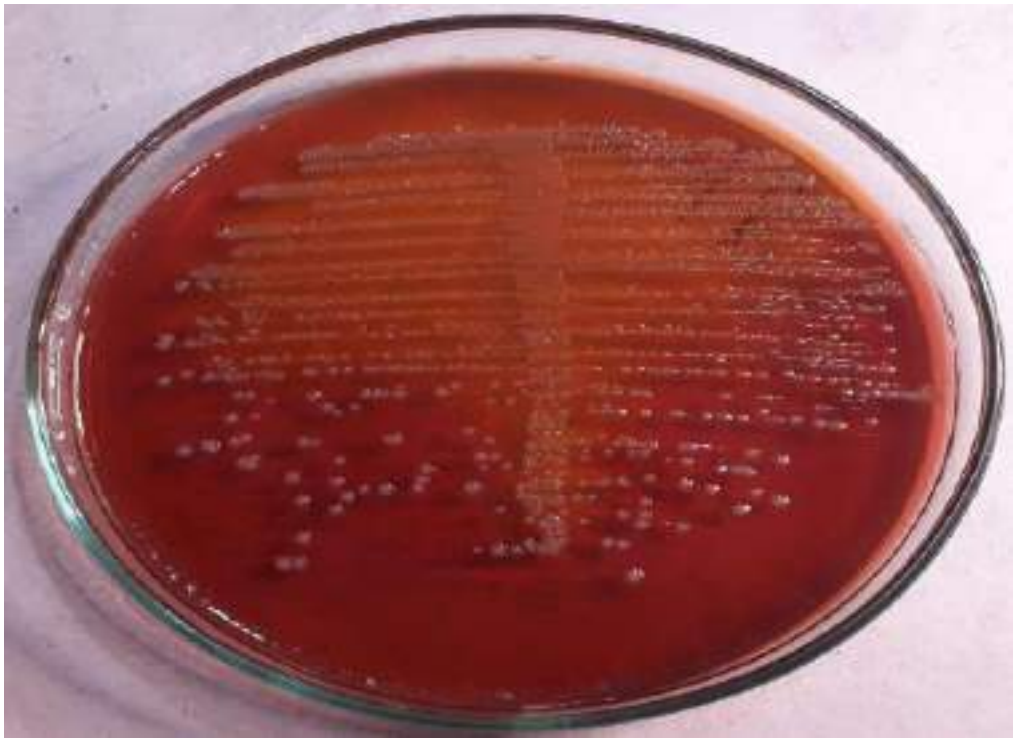


PICTURE 1: GROWTH OF *E. COLI* ON MACCONKEY'S AGAR (URINE SAMPLE)

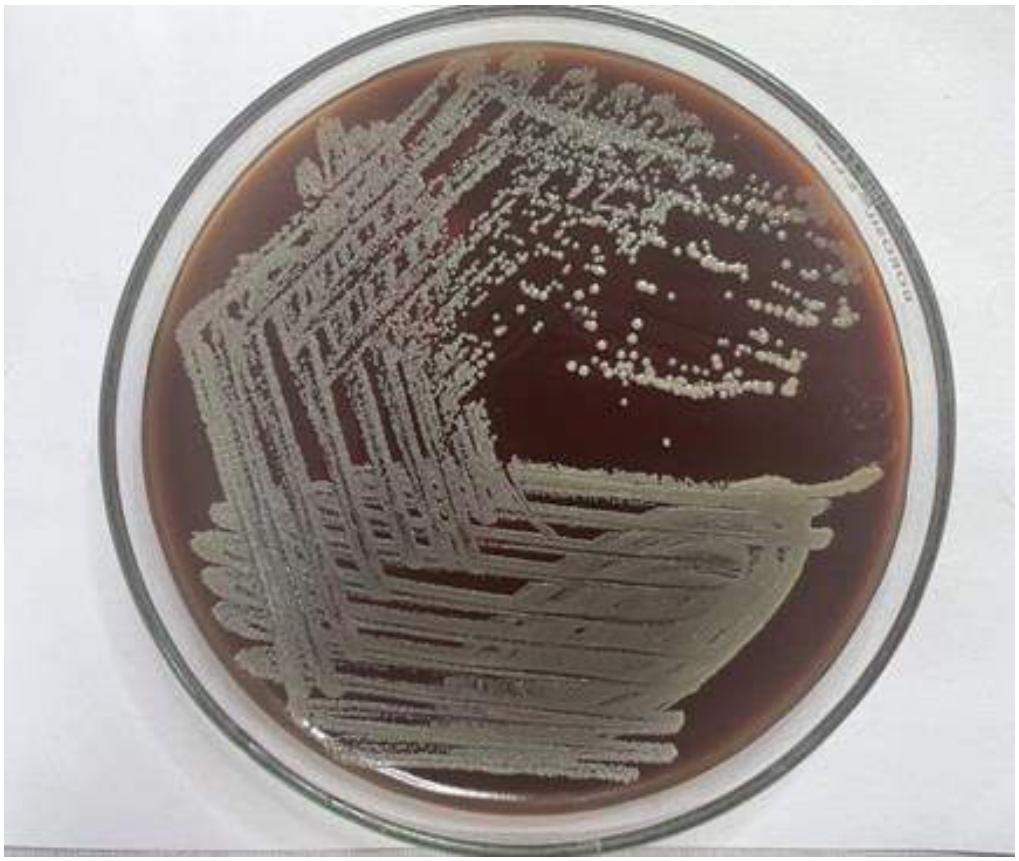
Mrd No 935591

PICTURE 2: GROWTH OF *KLEBSIELLA PNEUMONIAE* ON MACCONKEY'S AGAR (ENDOTRACHEAL SECRETIONS)

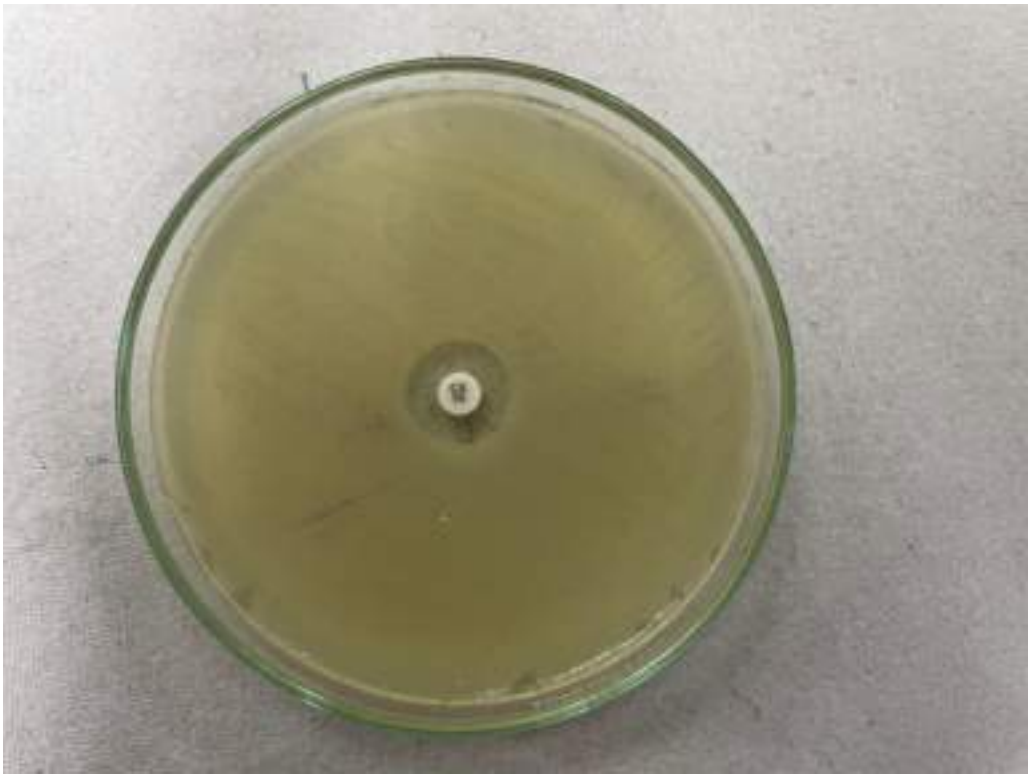
Mrd No 908701

PICTURE 3: GROWTH OF *E. COLI* ON MACCONKEY'S AGAR (SUBCULTURE FROM POSITIVE BLOOD CULTURE BOTTLE)

Mrd No 898013



PICTURE 4: GROWTH OF *STAPHYLOCOCCUS AUREUS* ON BLOOD AGAR (PUS SAMPLE)



PICTURE 5: CEFOXITIN SCREEN FOR DETECTION OF MRSA

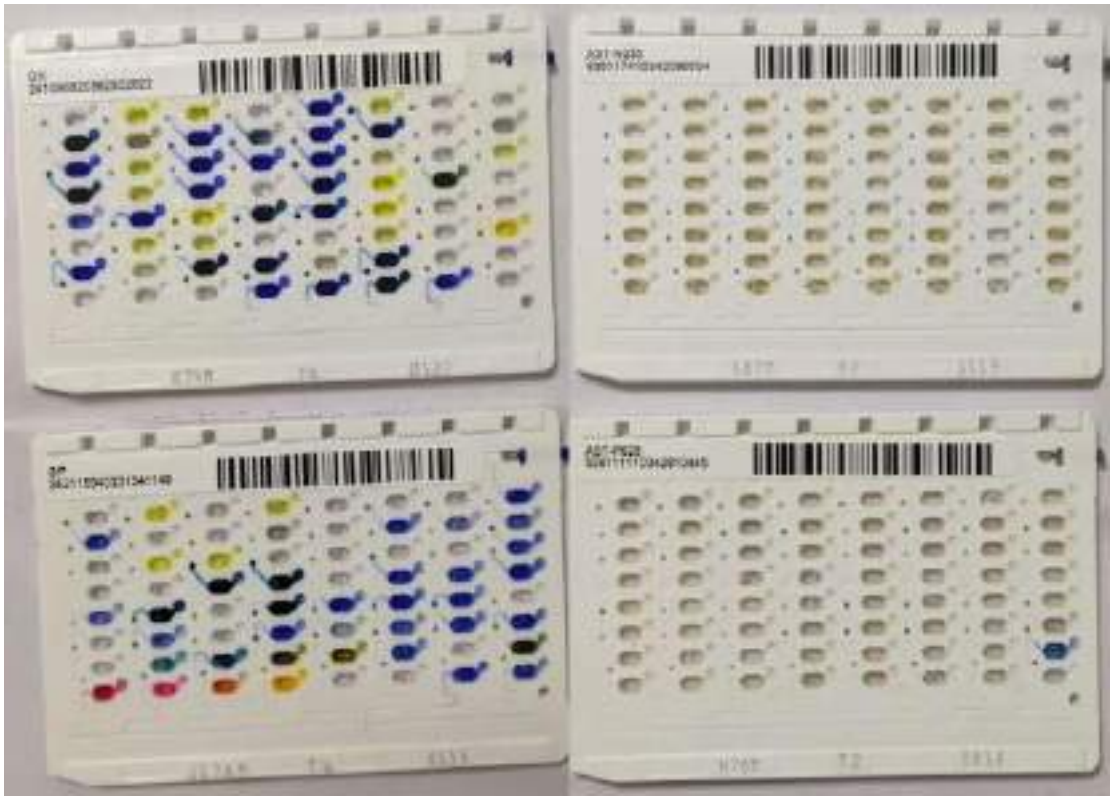
PICTURE 6: VANCOMYCIN DISK DIFFUSION FOR DETECTION OF VRE

PICTURE 7: BLOOD CULTURE BOTTLES

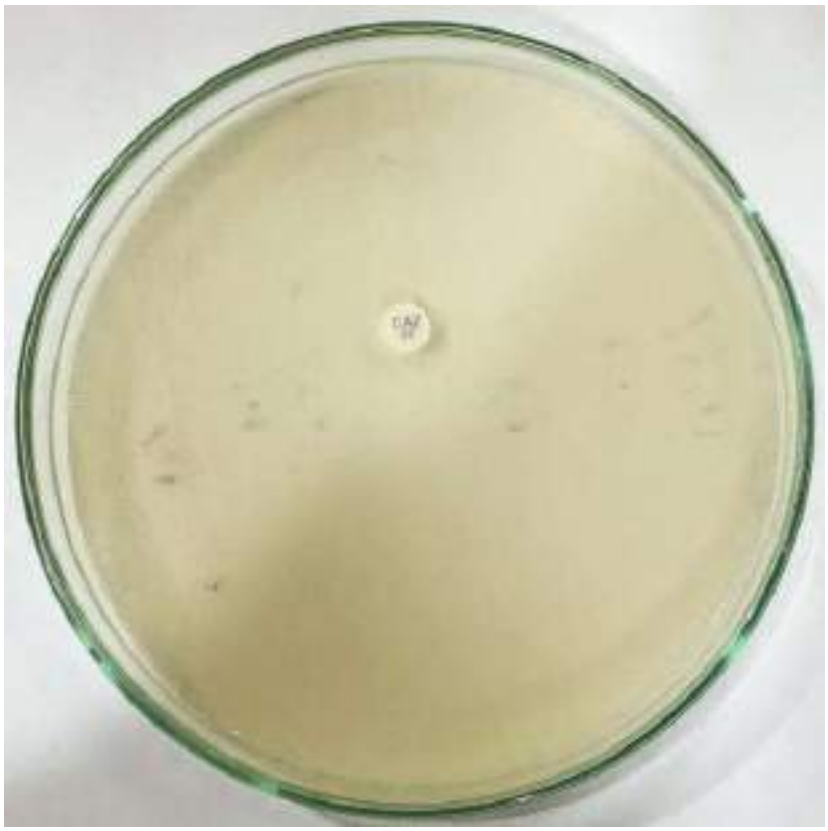
PICTURE 8: BACTEC 9240-BLOOD CULTURE AUTOMATED SYSTEM

PICTURE 9: BACT/ALERT-BLOOD CULTURE AUTOMATED SYSTEM

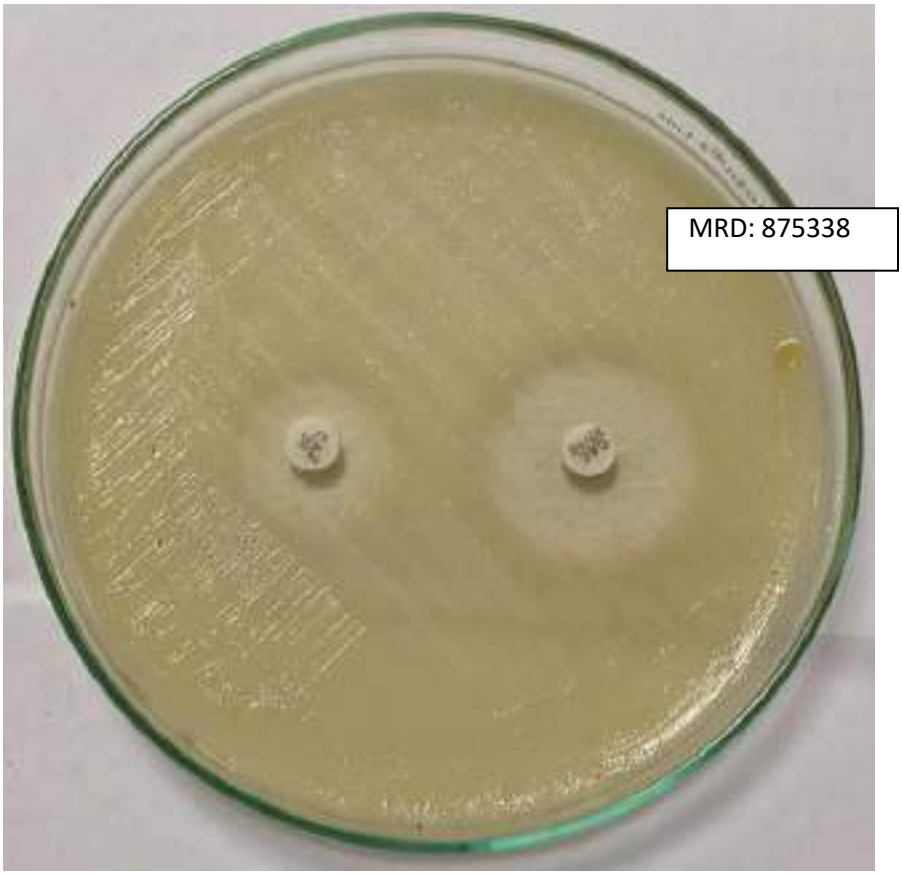
PICTURE 10: VITEK-2 SYSTEM



PICTURE 11: VITEK-2 IDENTIFICATION & AST CARDS

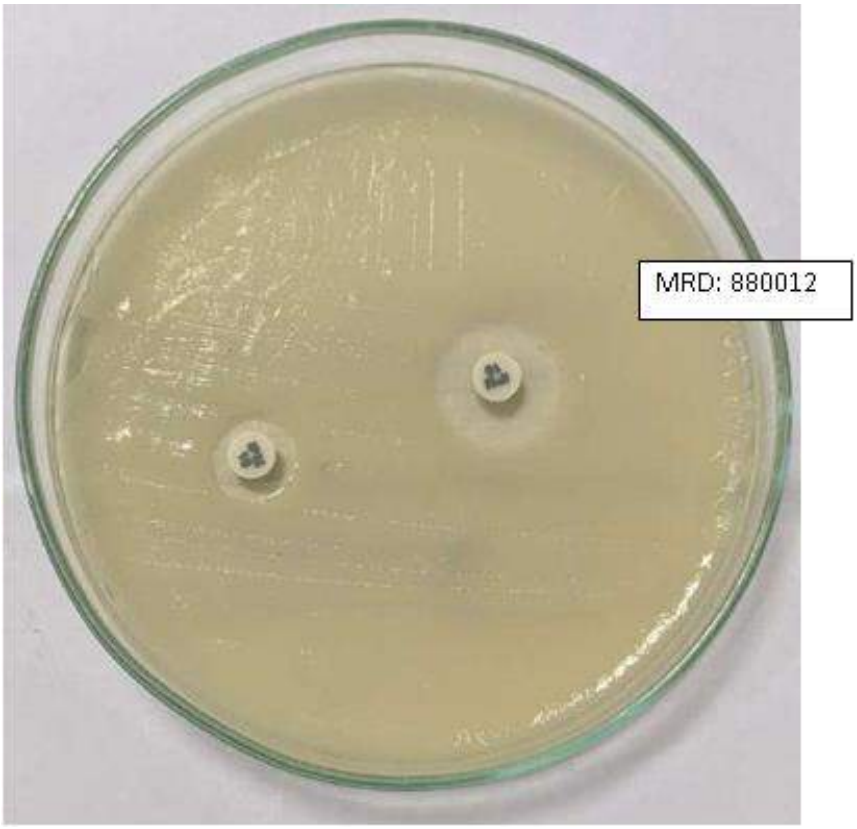


PICTURE 12: SCREENING TEST FOR ESBL PRODUCTION



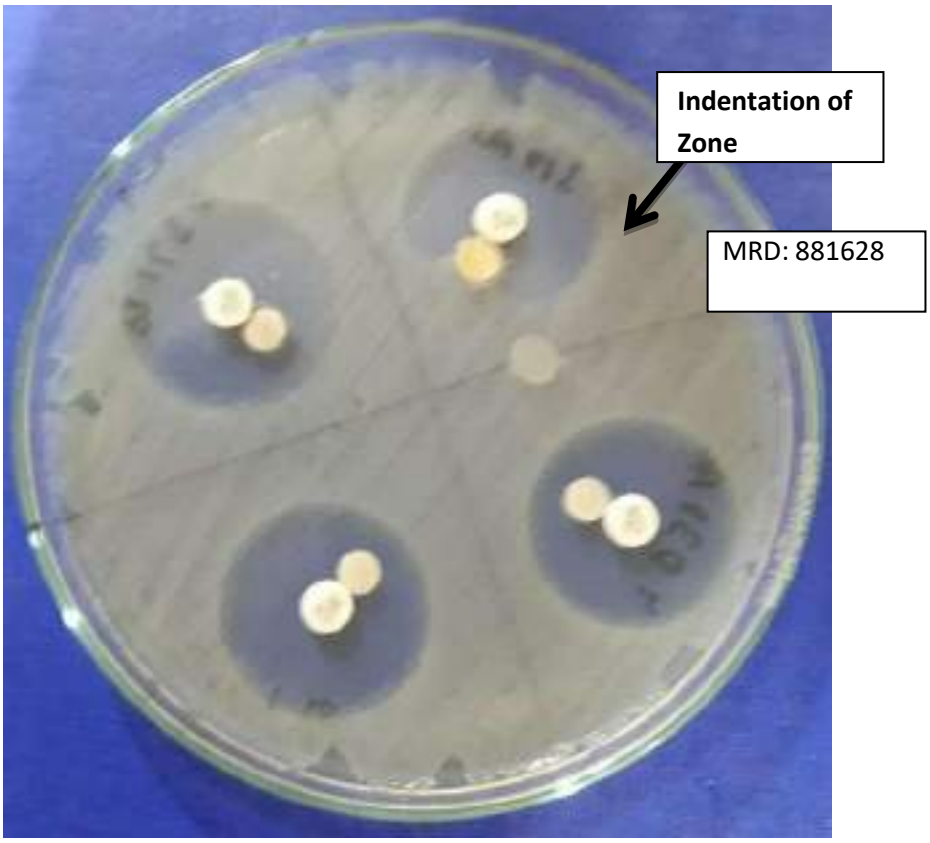
PICTURE 13: DOUBLE DISK DIFFUSION TEST FOR ESBL PRODUCTION

PICTURE 14: SCREENING TEST FOR MBL PRODUCTION



PICTURE 15: IMIPENEM EDTA DOUBLE DISK METHOD FOR MBL PRODUCTION

PICTURE 16: SCREENING TEST FOR AMPC PRODUCTION



PICTURE 17: CONFIRMATORY AMPC DISC TEST (DISC USED WAS CEFOXITIN AND AMPC DISC)

KEY TO MASTER CHART

AMPHO	-	AMPHOTERICIN B
APACHE SCORE	-	ACUTE PHYSIOLOGICAL ASSESSMENT AND CHRONIC HEALTH EVALUATION
BYLC	-	BUDDING YEAST LIKE CELLS
BAL	-	BRONCHOALVEOLAR LAVAGE
CASPO	-	CASPOFUNGIN
ET	-	ENDOTRACHEAL SECRETIONS
FLU	-	FLUCONAZOLE
MICA	-	MICAFUNGIN
NFES	-	NO FUNGAL ELEMENTS SEEN
NG	-	NO GROWTH
NF	-	NORMAL FLORA
NSG	-	NO SIGNIFICANT GROWTH
VORI	-	VOROCONAZOLE

S.no	MRD NO	NAME	AGE	SEX	DATE OF ADMISSION TO ICU	COMORBIDITIES	RISK FACTORS	DIAGNOSIS	APACHE	DEVICE DAYS-MECHANICAL VENTILATION	DEVICE DAYS-CENTRAL LINE	DEVICE DAYS-URINARY CATHETER	DIRECT EXAMINATION GRAM STAIN	WET MOUNT-INDIA INK/CRYPTOCOCCAL ANTIGEN/BACTERIAL ANTIGEN	KOH MOUNT	ZN STAINING	AFB CULTURE
1	156623	PS	63	M	01-01-2020	HTN	CAD	LRTI	13	4	4	4	GNB(+),GNCB(+)	-	-	NEG	-
2	868479	JK	55	F	02-01-2020	PULMONARY	ELDERLY	INFARCT	8	3	-	1	-	-	-	-	-
3	862342	HS	65	M	04-01-2020	HTN,DM	ELDERLY	CVA	9	10	6	6	ET-GNB,GNCB,CSF-NO M/O SEEN	NEG	ET-BYLC WITH PH	ET-NEG,CSF-NEG	-
4	873247	AN	59	M	04-01-2020	PULMONARY	REINTUBATION	LRTI	8	-	10	8	-	-	-	-	-
5	875338	AK	56	M	04-01-2020	DM	IMMOBILISATION	ACUTE GASTROENTERITIS	13	-	11	11	ET-GNCB	-	ET-NFES	ET-NEG	-
6	876018	BD	85	M	05-01-2020	DM,HTN	CAD	CKD	12	-	-	7	SP-GPC	-	SP-NFES	SP-NEG	-
7	876708	AK	70	M	06-01-2020	HTN	ELDERLY	CKD	16	11	11	10	-	-	-	-	-
8	876750	CK	76	F	07-01-2020	HTN	IMMUNOCOMPROMISED	ACUTE LVF	10	10	10	10	SP-GNB	-	SP-NFES	SP-NEG	-
9	876827	PK	53	M	08-01-2020	DM,HTN	CAD	CKD	14	-	16	4	-	-	-	-	-
10	878989	HS	23	M	11-01-2020	NO	MALNUTRITION	MULTIPLE SUBSTANCE ABUSE	14	3	-	3	ET-NO M/O SEEN	-	ET-NFES	ET-NEG	-
11	112607	V	45	F	11-01-2020	DM	IMMOBILISATION	CKD	12	-	-	3	-	-	-	-	-
12	880012	S	48	F	14-01-2020	DM	IMMOBILISATION	UTI, SEPSIS	12	-	-	5	-	-	ET-NFES	ET-NEG	-
13	879989	PD	75	M	14-01-2020	CARDIOVASCULAR	IMMOBILISATION	OLD CVA,UTI ,SEPSIS	15	-	-	4	ET-NO M/O SEEN	-	ET-NFES	-	-
14	880171	GS	39	M	15-01-2020	NO	IMMUNOCOMPROMISED	CLD	14	-	-	6	ET-GNCB	-	ET-NFES	ET-NEG	-
15	881021	GK	79	F	16-01-2020	DM,HTN	CAD	ALD	16	-	5	5	-	-	-	-	-
16	882149	DC	81	M	17-01-2020	DM	IMMOBILISATION	CKD & HEPATIC ENCEPHALOPATHY	16	-	-	15	SP-GNCB	-	ET-NFES	SP-NEG	-
17	789987	AN	73	M	17-01-2020	DM	IMMOBILISATION	ABSCESS LEFT LEG	10	21	5	5	SP-GNB,PLEURAL FL-NO M/O SEEN	-	SP-NFES,PLEURAL FL-NFES	-	-
18	881628	WB	75	F	18-01-2020	PULMONARY	SMOKING	LRTI,ENCEPHALOPATHY	16	6	-	10	CSF-NO M/O SEEN	NEG	ET-NFES	-	-
19	881535	SK	70	F	18-01-2020	CARDIOVASCULAR	CAD	CAD	16	6	10	10	SP-GNB	-	SP-NFES	SP-NEG	-
20	882132	RK	51	M	18-01-2020	HTN	IMMOBILISATION	SEPSIS,GALL STONE INDUCES PANCREATITIS	25	4	5	6	DRAIN FLUID-GNCB,ET-GNCB FEW	-	ET-HYALINE SEPTATE FUNGAL HYPHAE	ET-NEG	-
21	880605	KC	60	M	19-01-2020	DM	IMMOBILISATION	AKI WITH SEPSIS	13	-	5	5	-	-	-	-	-
22	378108	HS	28	M	21-01-2020	NO	MALNUTRITION	MULTIPLE SUBSTANCE ABUSE	16	-	-	7	-	-	-	-	-
23	883294	UG	73	F	22-01-2020	DM	SMOKING	RHEUMATIC FEVER	20	7	31	31	ET-GNB	-	ET-NFES	ET-NEG	-
24	884065	RK	47	M	23-01-2020	NO	IMMUNOCOMPROMISED	LIVER CIRRHOSIS	22	-	-	9	-	-	-	-	-
25	884616	GS	80	M	23-01-2020	DM	SMOKING	BRONCHIAL ASHTMA	15	-	6	6	-	-	-	-	-
26	43436	AR	65	F	25-01-2020	CARDIOVASCULAR	SMOKING	COAD	14	8	8	8	SP-GPC, PLEURAL FLUID-NO M/O SEEN	-	SP-NFES	SP-NEG	-
27	800066	RK	83	F	25-01-2020	DM,HTN	ELDERLY	CVA	16	-	-	15	-	-	ET-BYLC	SP-NEG	-
28	765969	IS	44	M	25-01-2020	DM	SMOKING	CLD	19	5	6	6	ET-GNCB	-	ET-NFES	ET-NEG	-
29	887295	RC	62	M	29-01-2020	HTN	OBESITY	RT CVA	11	-	-	-	ET-GNB	-	ET-NFES	ET-NEG	-
30	887253	MK	65	F	29-01-2020	NO	ELDERLY	MENINGITIS	11	-	6	-	-	-	-	-	-
31	888105	KS	68	M	29-01-2020	DM	OBESITY	CAD	12	-	-	-	ET-GNB	-	ET-NFES	ET-NEG	-
32	888131	BK	76	M	31-01-2020	NO	ELDERLY	CHRONIC LIVER DISEASE	12	-	-	-	-	-	ET-BYLC	ET-NEG	-
33	183229	SK	88	F	02-02-2020	NO	IMMUNOCOMPROMISED	CARCINOMA BREAST	12	-	-	10	-	-	-	-	-
34	470330	KC	60	M	03-02-2020	HTN	ELDERLY	MULTIPLE MYELOMA	12	-	5	9	-	-	-	-	-
35	891287	BS	25	M	03-02-2020	NO	MALNUTRITION	SHOCK	11	2	3	9	SP-GNB	-	SP-NFES	SP-NEG	-
36	891111	HS	39	M	04-02-2020	NO	IMMUNOCOMPROMISED	CLD	17	-	-	10	ET-GNB	-	ET-NFES	ET-NEG	-
37	881091	TK	37	F	05-02-2020	NO	REINTUBATION	POST LSCS	8	3	3	26	ET-GNB	-	-	-	-
38	892093	S	62	M	05-02-2020	HTN	OBESITY	CKD	21	-	-	6	-	-	-	-	-
39	891637	RS	52	F	07-02-2020	CHRONIC KIDNEY DISEASE	CAD	CKD	10	7	7	5	-	-	-	-	-
40	887205	SK	85	F	08-02-2020	CARDIOVASCULAR	OBESITY	CVA	19	5	-	5	-	-	-	-	-
41	894041	SK	75	F	09-02-2020	PULMONARY	ELDERLY	COPD	9	-	12	2	-	-	-	SP-NEG	-
42	133984	NK	59	F	11-02-2020	PULMONARY	SMOKING	LRTI	10	6	-	10	ET-GNB	-	-	ET-NEG	-
43	897069	S	27	M	12-02-2020	NO	IMMUNOCOMPROMISED	MULTIPLE DRUG ABUSER	17	3	-	10	-	-	-	-	-
44	896906	KK	49	M	13-02-2020	NO	IMMUNOCOMPROMISED	HERPES ZOSTER	15	-	-	-	CSF-NO M/O SEEN	NEG	-	-	-
45	896381	JS	28	M	13-02-2020	NO	MALNUTRITION	MULTIPLE SUBSTANCE ABUSE,SEVERE ANAEMIA	14	-	13	13	CSF-NO M/O SEEN	NEG	SP-NFES	SP-NEG	-
46	898013	TD	57	F	14-02-2020	DM	CAD	CKD	11	4	4	4	-	-	-	-	-
47	897728	JS	42	M	14-02-2020	HTN	OBESITY	ACUTE CORONARY SYNDROME	16	10	15	15	ET-BYLC	-	ET-BYLC	ET-NEG	-
48	129306	VK	66	F	16-02-2020	HTN,DM	ELDERLY	CKD	16	-	3	7	ET-GNB	-	ET-NFES	ET-NEG	-
49	899977	HS	45	M	19-02-2020	CHRONIC KIDNEY DISEASE	OBESITY	CKD	16	-	-	3	PLEURAL FL-NO M/O SEEN	-	-	PLEURAL FL-NEG	-
50	900876	NK	27	F	20-02-2020	NO	IMMUNOCOMPROMISED	POST LSCS	10	-	-	2	-	-	-	-	-
51	230659	GD	40	M	21-02-2020	DM	SEPSIS	DIABETIC KETOACIDOSIS	15	-	-	16	-	-	-	-	-
52	407856	TG	55	M	23-02-2020	PULMONARY	SMOKING	SWINE FLU	10	4	-	10	SP-GNB	-	SP-NFES	SP-NEG	-
53	897088	KK	36	F	23-02-2020	NO	MALNUTRITION	AFI WITH PANCYTOPENIA	17	1	-	10	-	-	-	-	-
54	902888	JS	42	M	23-02-2020	DM	SEPSIS	SHOCK WITH SEPSIS	13	4	-	11	SP-BYLC	-	SP-BYLC	SP-NEG	-
55	856925	RS	29	M	24-02-2020	NO	IMMUNOCOMPROMISED	SEIZURE DISORDER	11	-	-	7	SP-GNB	-	SP-NFES	SP-NEG	-
56	764015	MV	24	M	24-02-2020	DM	SEPSIS	MEMBRANOUS NEPHROPATHY WITH DM	7	16	-	26	SP-GNB	-	SP-NFES	-	-
57	872197	NS	70	M	25-02-2020	DM	ELDERLY	CHRONIC LIVER DISEASE	11	8	15	15	ASCITIC FLUID-NO M/O SEEN	-	-	-	-
58	904082	KK	82	F	25-02-2020	NO	ELDERLY	AFI WITH DEMENTIA	14	-	-	10	-	-	-	-	-
59	906474	SS	39	M	26-02-2020	NO	MALNUTRITION	OPC POISONING	12	-	-	9	ET-GNB	-	SP-NFES	ET-NEG	-
60	905101	GS	64	M	26-02-2020	DM	ELDERLY	CORONARY ARTERY DISEASE	11	-	-	7	-	-	-	-	-
61	27828	PK	52	F	01-03-2020	DM	SEPSIS	CKD	18	-	-	2	ASCITIC FL-NO M/O SEEN	-	ASCITIC FL-NFES	-	-
62	182908	KC	73	M	02-03-2020	HTN	CAD	OLD CVA	11	2	-	4	OTHER-GPC	-	OTHER-NFES	OTHER-NEG	-
63	909472	JL	62	M	03-03-2020	NO	ELDERLY	CHRONIC LIVER DISEASE	10	-	-	4	CSF-NO M/O SEEN	NEG	ET-HYALINE SEPTATE FUNGAL HYPHAE	ET-NEG	-
64	909520	VK	74	M	03-03-2020	DM,HTN	SEPSIS	CKD	11	-	4	4	CSF-NO M/O SEEN,ET-GNB	NEG	ET-BYLC WITH PH	ET-NEG	-
65	908701	JS	22	M	04-03-2020	NO	MALNUTRITION	ALTERED SENSORIUM	20	-	-	5	-	-	-	-	-
66	908647	KS	63	M	04-03-2020	NO	ELDERLY	SNAKE BITE	10	3	-	3	SP-GPC	-	SP-BYLC WITH PH	SP-NEG	-
67	910265	DS	76	M	04-03-2020	NO	ELDERLY	SEPTIC SHOCK	10	-	-	4	SP-GPC	-	SP-BYLC WITH PH	SP-NEG	-
68	126819	SK	67	M	05-03-2020	DM	SEPSIS	SEPSIS WITH DIABETES	12	-	-	5	-	-	-	-	-
69	911611	KS	55	M	05-03-2020	CHRONIC KIDNEY DISEASE	SEPSIS	CHRONIC KIDNEY DISEASE	12	-	-	7	OTHER-NO M/O SEEN	-	-	OTHER-NEG	-
70	876528	JR	43	M	08-03-2020	NO	MALNUTRITION	ACUTE FEBRILE ILLNESS	9	2	-	5	OTHER-GNB	-	-	OTHER-NFES	-
71	223050	KS	53	M	08-03-2020	DM	SEPSIS	CHRONIC KIDNEY DISEASE	-	-	-	5	-	-	-	-	-
72	886539	NK	64	F	08-03-2020	DM	SEPSIS	ACUTE KIDNEY INJURY	28	-	-	3	SP-GNB	-	SP-BYLC WITH PH	SP-NEG	-
73	881444	VG	72	M	08-03-2020	NO	ELDERLY	CARCINOMA LARYNX	18	7	7	7	GNB	-	OTHER-NFES	SP-NEG,OTHER-NEG	-
74	912877	HS	45	M	09-03-2020	NO	IMMUNOCOMPROMISED	CHRONIC LIVER DISEASE	19	-	-	5	-	-	-	-	-
75	912978	NS	58	M	09-03-2020	NO	IMMUNOCOMPROMISED	HEPATIC ENCEPHALOPATHY	12	-	9	9	CSF-NO M/O SEEN,ET-GNB	NEG	-	NEG	-
76	912929	BB	65	M	09-03-2020	DM	ELDERLY	ACUTE KIDNEY INJURY ,LITHIUM TOXICITY	13	5	5	5	-	-	-	-	-
77	864684	TR	54	M	10-03-2020	CHRONIC KIDNEY DISEASE	SEPSIS	PYLEONEPHRITIS	12	-	-	3	-	-	-	-	-
78	338664	RK	45	M	11-03-2020	NO	IMMUNOCOMPROMISED HIV+	ACUTE FEBRILE ILLNESS	19	-	-	-	-	INDIA INK ,CRYPTO-POSITIVE	-	-	-
79	673246	SD	86	F	12-03-2020	NO	MALNUTRITION	SEIZURE DISORDER,OLD CVA	15	1	1	3	-	-	-	-	-

S.no	MRD NO	FUNGAL CULTURE	CULTURE URINE	BODY FLUID	BLOOD	ET/SPUTUM/BAL	SOFT TISSUE INFECTION	HOSPITAL /COMMUNITY ACQUIRED INFECTION	VAP/CLABSI/CAUTI
1	156623	-	-	-	NG	SPUTUM-ENTEROBACTER AEROGENES	-	COMMUNITY	-
2	868479	-	NG	-	-	ET-KLEBSIELLA PNEUMONIAE	-	COMMUNITY	-
3	862342	-	NG	-	NG	ET-ENTEROBACTER CLOACAE, ACINETOBACTER BAUMANNII	-	HOSPITAL	-
4	873247	-	-	-	NG	ET-KLESIELLA PNEUMONIAE	-	HOSPITAL	VAP
5	875338	ET-NG	NG	-	NG	ET-ACINETOBACTER BAUMANNII	-	HOSPITAL	-
6	876018	-	E COLI	-	NG	SP-NF	-	COMMUNITY	-
7	876708	-	CANDIDA PARAPSILOSIS	-	NG	ET-KLEBSIELLA PNEUMONIAE	-	COMMUNITY	-
8	876750	-	-	-	-	SP-KLEBSIELLA PNEUMONIAE	-	COMMUNITY	-
9	876827	-	ENTEROCOCCUS FAECIUM	-	NG	-	-	COMMUNITY	-
10	878989	-	NG	-	STAPHYLOCOCCUS AUREUS	ET-NG	-	COMMUNITY	-
11	112607	-	E COLI	-	NG	-	-	COMMUNITY	-
12	880012	-	-	-	-	ET-ACINETOBACTER BAUMANNII	-	HOSPITAL	-
13	879989	-	NG	-	STAPHYLOCOCCUS HEMOLYTICUS	ET-KLEBSIELLA PNEUMONIAE	-	COMMUNITY	-
14	880171	-	-	-	-	ET-ACINETOBACTER BAUMANNII	-	HOSPITAL	-
15	881021	-	-	-	KLEBSIELLA PNEUMONIAE	-	-	COMMUNITY	-
16	882149	-	NSG	-	NG	SP-ACINETOBACTER BAUMANNII	-	HOSPITAL	-
17	789987	-	-	PLEURAL FL-NG	NG	SP-PSEUDOMONAS LUTEOLA	-	HOSPITAL	-
18	881628	-	KLEBSIELLA PNEUMONIAE	-	NG	ET-NG	-	COMMUNITY	-
19	881535	-	-	-	-	SP-KLEB PNEUMONIAE	-	COMMUNITY	-
20	882132	-	NG	-	NG	ET-ACINETOBACTER BAUMANNII	-	HOSPITAL	-
21	880605	-	E COLI	-	NG	-	-	COMMUNITY	-
22	378108	-	-	-	STAPHYLOCOCCUS AUREUS	-	-	COMMUNITY	-
23	883294	-	NG	-	KLEBSIELLA PNEUMONIAE	ET-KLEBSIELLA PNEUMONIAE	-	COMMUNITY	-
24	884065	-	-	-	CANDIDA ALBICANS	-	-	-	-
25	884616	-	E COLI	-	NG	-	-	COMMUNITY	-
26	43436	-	STAPH AUREUS	-	NG	SP-NF	-	COMMUNITY	-
27	800066	ET-CANDIDA TROPICALIS	NG	-	NG	SP-KLEBSIELLA PNEUMONIAE	-	COMMUNITY	-
28	765969	ET-NG	-	-	NG	ET-ACINETOBACTER BAUMANNII	-	HOSPITAL	-
29	887295	-	NG	-	NG	ET-BURKHOLDERIA CEPACIA	-	HOSPITAL	-
30	887253	-	-	-	STAPHYLOCOCCUS AUREUS	-	PUS-STAPH AUREUS	COMMUNITY	-
31	888105	-	NG	-	NG	ET-ENTEROBACTER CLOACAE	-	COMMUNITY	-
32	888131	-	-	-	NG	ET-ACINETOBACTER BAUMANNII	-	HOSPITAL	-
33	183229	-	NG	-	CANDIDA ALBICANS	-	-	-	-
34	470330	-	-	-	ELIZABETHKINGIA MENINGOSEPTICA	-	-	HOSPITAL	-
35	891287	-	NG	-	KLEBSIELLA OXYTOCA	SP-E COLI	-	COMMUNITY	-
36	891111	-	NG	-	NG	ET-ENTEROBACTER CLOACAE	-	COMMUNITY	-
37	881091	-	NG	-	-	ET-PSEUDOMONAS AERUGINOSA	-	HOSPITAL	PVAP
38	892093	-	E COLI	-	E COLI	-	-	COMMUNITY	-
39	891637	-	PSEUDOMONAS AERUGINOSA	-	NG	-	-	HOSPITAL	-
40	887205	-	-	-	NG	ET-KLEBSIELLA PNEUMONIAE,BURKHOLDERIA CEPACIA	-	HOSPITAL	-
41	894041	-	ENTEROCOCCUS FAECIUM	-	NG	-	-	COMMUNITY	-
42	133984	-	NG	-	CANDIDA TROPICALIS	ET-KLEBSIELLA PNEUMONIAE	-	COMMUNITY	-
43	897069	-	-	-	STAPHYLOCOCCUS AUREUS	-	-	COMMUNITY	-
44	896906	-	-	CSF-NG	STAPHYLOCOCCUS EPIDERMIDIS	-	CORNEA SWAB-STAPH AUREUS	COMMUNITY	-
45	896381	-	-	CSF-NG	NG	E COLI	-	COMMUNITY	-
46	898013	-	NG	-	ACROMOBACTER XYLOSIDANS	-	PUS-STAPHYLOCOCCUS AUREUS	COMMUNITY	-
47	897728	-	-	-	NG	ET-KLEBSIELLA PNEUMONIAE	-	COMMUNITY	-
48	129306	ET-NG	NG	-	NG	ET-ACINETOBACTER BAUMANNII	-	HOSPITAL	-
49	899977	-	-	PLEURAL FL-NG	ENTEROCOCCUS FAECIUM	-	-	COMMUNITY	-
50	900876	-	KLEBSIELLA PNEUMONIAE	-	-	-	VAGINAL SWAB-NG	COMMUNITY	-
51	230659	-	NG	NG	ENTEROCOCCUS FAECIUM	-	-	COMMUNITY	-
52	407856	-	-	-	NG	SP-KLEBSIELLA PNEUMONIAE	-	COMMUNITY	-
53	897088	-	E COLI	-	NG	-	-	COMMUNITY	-
54	902888	-	NG	-	CITROBACTER FREUNDII	SP-NF	-	COMMUNITY	-
55	856925	-	NG	-	NG	SP-KLEB OXYTOCA	-	COMMUNITY	-
56	764015	-	NG	-	NG	SP-KLEB OXYTOCA	-	COMMUNITY	-
57	872197	-	KLEBSIELLA PNEUMONIAE	-	NG	-	-	COMMUNITY	-
58	904082	-	KLEBSIELLA PNEUMONIAE	-	-	-	-	COMMUNITY	-
59	906474	-	-	-	-	ET-PSEUDOMONAS AERUGINOSA	-	HOSPITAL	-
60	905101	-	NG	DRAIN FL-ENTEROCOCCUS FAECIUM, E COLI	NG	-	-	COMMUNITY	-
61	27828	-	KLEBSIELLA PNEUMONIAE	ASCITIC FLUID-NG	NG	-	-	COMMUNITY	-
62	182908	-	PROTEUS MIRABILIS	-	KLEBSIELLA PNEUMONIAE	-	-	COMMUNITY	-
63	909472	ET-ASPERGILLUS FUMIGATUS	ENTEROCOCCUS FAECALIS	CSF-NG	NG	ET-NG	-	HOSPITAL	-
64	909520	ET-CANDIDA TROPICALIS	ENTEROCOCCUS FAECALIS	CSF-NG	NG	ET-KLEBSIELLA PNEUMONIAE	-	COMMUNITY	-
65	908701	-	NG	-	E COLI	-	-	COMMUNITY	-
66	908647	TISSUE-NG	-	-	NG	-	PUS-NG, TISSUE-E COLI,ACINETOBACTER BAUMANNII	HOSPITAL	-
67	910265	-	E COLI	-	KLEBSIELLA PNEUMONIAE	NF	-	COMMUNITY	-
68	126819	-	NG	-	ACHROMOBACTER XYLOSIDANS	-	-	HOSPITAL	-
69	911611	-	E COLI	-	E COLI	-	-	COMMUNITY	-
70	876528	OTHER-NG	NG	-	NG	-	PUS-E COLI	COMMUNITY	-
71	223050	-	E COLI	-	NG	-	-	COMMUNITY	-
72	886539	-	-	-	-	SP-KLEBSIELLA SP	-	COMMUNITY	-
73	881444	-	NG	-	NG	-	WOUND SWAB-PSEUDOMONAS SP.	HOSPITAL	-
74	912877	-	NG	-	STREPTOCOCCUS AGALACTIAE	-	-	HOSPITAL	-
75	912978	ET-CANDIDA STELLATOIDES	NG	CSF-NG	STAPHYLOCOCCUS AUREUS	ET-KLEBSIELLA PNEUMONIAE	-	COMMUNITY	-
76	912929	-	NG	-	NG	ET-ACINETOBACTER BAUMANNII	-	HOSPITAL	-
77	864684	-	E COLI	-	E COLI	-	-	COMMUNITY	-
78	338664	CSF-CRYPTOCOCCUS NEOFORMANS	-	-	-	-	NO	-	-
79	673246	-	E COLI	-	-	-	-	COMMUNITY	-

S.no	MRD NO	MDR	XDR	PDR	MRSA/VRE	ESBL(CONFIRMED)	ESBL(PROBABLE)	MBL (PROBABALE)	MBL (CONFIRMED)	Amp C (PROBABALE)	Amp C (CONFIRMED)	RESPIRATORY																				PUS																									
												AMP	TIC	AMK	GEN	COT	CAZ	CPM	LEVO	MIN	CIP	TZP	CSL	AMC	IPM	ERT	MEM	DOR	CTR	TGC	PB	AMP	TIC	AMK	GEN	COT	CAZ	CPM	LEVO	MIN	CIP	TZP	CSL	AMC	IPM	ERT	MEM	CTR/CTX	PB	TG	AMP	TIC	AMK	GEN	COT	CEP	CXM
1	156623	MDR	-	-	-	-	ESBL	-	-	-	-	-	R	R	R	R	R	R	-	R	R	R	R	R	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	868479	MDR	XDR	-	-	ESBL	ESBL	MBL	MBL	AMP C	DISTORTION OF ZONE	-	R	R	R	R	R	-	R	R	-	R	R	R	R	R	-	S	R	R	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	862342	MDR	-	-	-	-	-	-	-	-	-	S	R	S	S	S	S	S	S	R	S	R	R	R	R	S	S	-	S	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	873247	MDR	XDR	-	-	ESBL	ESBL	MBL	MBL	AMP C	-	R	R	S	R	R	R	R	R	S	R	R	R	R	R	R	R	R	R	R	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	875338	MDR	XDR	-	-	ESBL	ESBL	MBL	-	AMP C	FLATTENING OF ZONE	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	S	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	876018	MDR	XDR	-	-	ESBL	ESBL	MBL	MBL	-	FLATTENING OF ZONE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	R	R	R	R	R	R	R
7	876708	MDR	XDR	-	-	ESBL	ESBL	MBL	-	AMP C	DISTORTION OF ZONE	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	876750	NO	NO	-	-	ESBL	ESBL	MBL	-	-	-	S	R	S	S	S	S	S	S	S	S	S	S	S	S	S	R	S	S	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	876827	MDR	XDR	-	-	-	ESBL	MBL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	878989	MDR	-	-	MRSA	-	ESBL	MBL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	112607	MDR	-	-	-	ESBL	ESBL	MBL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	R	R	S	S	S	R	R
12	880012	MDR	XDR	-	-	-	ESBL	MBL	-	-	-	R	R	R	R	R	R	R	R	R	R	R	S	R	R	R	R	R	R	S	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	879989	MDR	XDR	-	-	-	ESBL	MBL	-	-	-	R	R	MS	R	R	R	R	R	R	R	R	R	R	MS	R	R	R	R	S	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	880171	MDR	XDR	-	-	-	ESBL	MBL	-	AMP C	DISTORTION OF ZONE	R	R	R	R	R	R	R	R	MS	R	R	MS	R	R	R	R	R	R	S	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	881021	MDR	XDR	-	-	-	ESBL	MBL	-	AMP C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	882149	MDR	XDR	-	-	ESBL	ESBL	MBL	-	-	-	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	MS	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17	789987	MDR	XDR	-	-	ESBL	ESBL	MBL	-	-	-	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	S	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	881628	MDR	XDR	-	-	-	ESBL	MBL	-	AMP C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	R	R	R	R	R	R	R
19	881535	MDR	XDR	-	-	-	ESBL	MBL	-	AMP C	FLATTENING OF ZONE	R	R	S	S	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	882132	MDR	XDR	-	-	ESBL	ESBL	MBL	-	AMP C	DISTORTION OF ZONE	R	R	R	R	R	R	R	S	R	R	R	R	R	R	R	R	R	R	S	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21	880605	MDR	XDR	-	-	-	ESBL	MBL	-	AMP C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	R	R	R	R	R	R	R
22	378108	MDR	-	-	MRSA	-	ESBL	MBL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23	883294	MDR	XDR	-	-	ESBL	ESBL	MBL	-	-	-	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24	884065	NO	-	-	-	ESBL	ESBL	MBL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25	884616	MDR	-	-	-	ESBL	ESBL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	R	R	S	R	R	R	R
26	43436	MDR	-	-	MRSA	-	ESBL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27	800066	MDR	XDR	-	-	ESBL	ESBL	MBL	-	AMP C	-	R	R	S	S	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28	765969	MDR	XDR	-	-	ESBL	ESBL	-	-	-	-	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	S	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29	887295	MDR	-	-	-	-	ESBL	-	-	-	-	-	-	-	-	R	R	-	R	-	-	-	-	-	S	-	MS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30	887253	MDR	-	-	MRSA	-	ESBL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
31	888105	MDR	XDR	-	-	-	ESBL	MBL	-	-	-	R	R	R	R	S	R	R	R	R	R	R	R	R	R	R	R	R	R	R	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
32	888131	MDR	XDR	-	-	-	ESBL	-	-	-	-	R	R	R	R	S	R	R	R	R	R	R	S	R	R	R	R	R	R	R	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
33	183229	NO	-	-	-	-	ESBL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
34	470330	MDR	-	-	-	-	ESBL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
35	891287	MDR	-	-	-	ESBL	ESBL	MBL	MBL	-	-	4	-	S	S	-	-	S	R	MS	R	R	R	R	R	R	R	R	R	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
36	891111	MDR	XDR	-	-	-	ESBL	-	-	-	-	R	R	S	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
37	881091	MDR	XDR	-	-	-	ESBL	MBL	MBL	AMP C	FLATTENING OF ZONE	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
38	892093	MDR	-	-	-	ESBL	ESBL	MBL	MBL	-	DISTORTION OF ZONE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	R	R	S	S	R	R	R
39	891637	NO	NO	-	-	ESBL	ESBL	MBL	MBL	AMP C	DISTORTION OF ZONE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	S	S	S	S	S	S	S
40	887205	MDR	XDR	-	-	ESBL	ESBL	-	MBL	-	-	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
41	894041	MDR	XDR	-	-	-	ESBL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
42	133984	MDR	XDR	-	-	ESBL	ESBL	-	MBL	AMP C	-	R	R	R	S	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
43	897069	MDR	-	-	-	-	ESBL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
44	896906	MDR	-	-	-	-	ESBL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
45	896381	MDR	XDR	-	-	-	ESBL	-	-	AMP C	-	R	R	S	S	R	R	R	R	R	R	R	R	R	R	R	R	R	R	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
46	898013	MDR	XDR	-	MRSA	-	ESBL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
47	897728	MDR	XDR	-	-	ESBL	ESBL	-	-	-	-	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
48	129306	MDR	-	-	-	-	ESBL	-	-	AMP C	DISTORTION OF ZONE	R	R	R	R	R	R	R	R	S	R	R	S	R	R	R	R	R	R	S	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
49	899977	MDR	XDR	-	VRE	-	ESBL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
50	900876	MDR	-	-	-	-	ESBL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	R	R	R	S	R	R	R
51	230659	MDR	-	-	-	-	ESBL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
52	407856	NO	NO	-	-	ESBL	ESBL	MBL	-	-	-	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
53	897088	NO	NO	-	-	-	ESBL	MBL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
54	902888	MDR	XDR	-	-	-	ESBL	MBL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
55	856925	NO	NO	-	-	-	ESBL	MBL	-	-	-	S	R	S	S	S	R	S	S	S	S	S	S	S	S	S	MS	-	S	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
56	764015	NO	NO	-	-	-	ESBL	MBL	-	-	-	S	R	S	S	S	R	S	S	S	S	S	S	S	S	S	S	S	S	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
57	872197	MDR	XDR	-	-	-	ESBL	MBL	-	AMP C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	R	R	S	S	R	R	R
58	904082	NO	NO	-	-	-	ESBL	MBL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	S	S	S	S	S	S	S
59	906474	MDR	XDR	-	-	-	ESBL	MBL	-	-	-	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	-	R	-	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
60	905101	MDR	XDR	-	-	-	ESBL	MBL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
61	27828	MDR	XDR	-	-	-	ESBL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	R	R	R	R	R	R	R
62	182908	MDR	-	-	-	ESBL	ESBL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	R	S	S	S	R	R	S
63	909472	NO	NO	-	-	-	ESBL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
64	909520	MDR	XDR	-	-	ESBL	ESBL	-	-	-	FLATTENING OF ZONE	R	R	S	S	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
65	908701	MDR	XDR	-	-	-	ESBL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
66	908647	MDR	XDR	-	-	ESBL	ESBL	MBL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	R	S	S	S	R	R	R	R	S,S	R	S	S	R	R	R	R	R	R	S,S	R	R	S	R	S	R	R
67	910265	MDR	XDR	-	-	-	ESBL	MBL	-	-	DISTORTION OF ZONE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	R	R	S	R	S	R	R
68	126819	MDR	XDR	-	-	-	ESBL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
69	911611	MDR	-	-	-	-	ESBL	MBL	-	AMP C	DISTORTION OF ZONE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	R	R	S	R	R	R	R
70	876528	MDR	XDR	-	-	-	ESBL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	R	R	S	S	R	R	R	R	S	R	R	R	R	R	R	R	R	-	S	-	-	-	-	-	-	-
71	223050	MDR	-	-	-	-	ESBL	MBL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	R	R	S	R	R	R	R
72	886539	MDR	XDR	-	-	-	ESBL	MBL	-	-	-	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
73	881444	NO	NO	-	-	-	ESBL	MBL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	R	S	S	S	S	S	S	-	-	S	S	S	-	S	R	S	S	-	-	-	-	-	-	-	-	-
74	912877	MDR	XDR	-	-	-	ESBL	MBL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
75	912978	MDR	XDR	-	MRSA	ESBL	ESBL	MBL	-	AMP C	-	R	R	S	S	R	R	R	R	R	R	R	R	R	R	R	R	-	R	R	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
76	912929	MDR	XDR	-	-	ESBL	ESBL	MBL	-	-	-	R	R	R	R	R	R	R	R	S	R	R	R	R	R	R	R	R	R	S	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
77	864684	MDR	XDR	-	-	ESBL	ESBL	MBL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	R	R	S	S	R	R	R
78	338664	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
79	673246	MDR	XDR	-	-	-	ESBL	MBL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	R	R	R	R	R	R	R

S.no	MRD NO	ANTIMICROBIAL SENSITIVITY											BLOOD/BODY FLUID																			GPC														ANTIFUNGAL SENSITIVITY					OUTCOME
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		CTR	CAZ	NX	OF	NIT	TZP	CSL	AMC	ERT	IPM	FOS	AMP	AMK	GEN	LEVO	CIP	COT	CXM	CAZ	CTR	CPM	CSL	AMC	TZP	IPM	MEM	ERT	DOR	-	MIN	TGC	COL	PEN	DPT	CIP	LEV	GEN/GHL	COT	TET	RIF	NIT	TEC	VAN	LZ	ERY	CLINDA	FLU	VORI	AMPHO	CASPO	MICA	
1	156623	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DISCHARGED
2	868479	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DAMA
3	862342	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DAMA
4	873247	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DISCHARGED
5	875338	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DISCHARGED
6	876018	R	R	R	R	S	R	S	R	R	S	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DAMA
7	876708	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	S	S	S	S	S	DISCHARGED
8	876750	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DISCHARGED
9	876827	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	R	R	R	R	R	R	R	R	S	S	-	-	-	-	-	-	DAMA
10	878989	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	R	S	R	R	R	S	S	S	S	S	S	S	S	-	-	-	-	-	DISCHARGED
11	112607	R	R	R	R	MS	R	S	R	MS	S	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DAMA
12	880012	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DAMA
13	879989	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DISCHARGED
14	880171	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DAMA
15	881021	-	-	-	-	-	-	-	-	-	-	-	R	R	R	-	R	R	R	R	R	R	R	R	R	R	R	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DAMA
16	882149	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DISCHARGED
17	789987	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DAMA
18	881628	R	R	R	R	R	R	R	R	R	S	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DISCHARGED
19	881535	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	EXPIRED
20	882132	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DAMA
21	880605	R	R	R	R	R	R	R	R	R	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DISCHARGED
22	378108	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	R	S	R	R	R	R	S	S	-	S	S	S	-	-	-	-	-	DAMA
23	883294	-	-	-	-	-	-	-	-	-	-	-	R	R	R	-	R	R	R	R	R	R	R	R	R	R	R	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	EXPIRED
24	884065	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	S	S	S	S	S	DISCHARGED
25	884616	R	R	R	R	R	S	S	MS	S	S	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DAMA
26	43436	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DISCHARGED
27	800066	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	EXPIRED
28	765969	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DAMA
29	887295	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DISCHARGED
30	887253	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	R	S	R	R	S	S	S	S	-	S	S	S	R	S	-	-	-	DAMA
31	888105	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	EXPIRED
32	888131	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DISCHARGED
33	183229	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	S	S	S	S	S	DAMA
34	470330	-	-	-	-	-	-	-	-	-	-	-	-	-	7	R	-	R	-	R	-	-	-	-	-	-	-	-	-	-	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DISCHARGED
35	891287	-	-	-	-	-	-	-	-	-	-	-	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	EXPIRED
36	891111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DISCHARGED
37	881091	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	EXPIRED
38	892093	R	R	R	R	S	S	S	MS	S	S	S	R	S	S	R	R	R	R	R	R	R	S	MS	S	S	S	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DAMA
39	891637	S	S	S	S	S	S	S	S	S	S	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DAMA
40	887205	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DAMA
41	894041	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7	R	R	R	R	R	S	R	R	S	S	S	-	-	-	-	-	DAMA
42	133984	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	S	S	S	S	S	DISCHARGED
43	897069	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	R	R	S	S	R	R	S	S	-	-	-	-	-	-	-	-	DISCHARGED
44	896906	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	R	R	R	R	S	S	R	S	-	S	R	S	-	-	-	-	DISCHARGED
45	896381	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DISCHARGED
46	898013	-	-	-	-	-	-	-	-	-	-	-	R	R	R	-	S	R	R	R	R	R	R	R	R	R	R	-	-	S	-	-	R	S	R	R	S	S	S	S	-	S	S	S	R	R	-	-	-	DISCHARGED
47	897728	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DISCHARGED
48	129306	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DISCHARGED
49	899977	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	R	R	R	R	R	R	R	S	-	-	-	-	-	-	-	-	DISCHARGED
50	900876	R	S	S	S	MS	S	S	S	S	S	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DISCHARGED
51	230659	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	S	R	S	S	S	R	S	R	R	R	S	S	-	-	-	-	DISCHARGED
52	407856	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	EXPIRED
53	897088	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DISCHARGED
54	902888	-	-	-	-	-	-	-	-	-	-	-	20	S	MS	R	R	R	R	R	R	R	R	R	R	R	MS	R	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DISCHARGED
55	856925	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DAMA
56	764015	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DISCHARGED
57	872197	R	R	R	R	R	R	R	R	R	R	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DISCHARGED
58	904082	S	S	S	S	S	S	S	S	S	S	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DAMA
59	906474	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DISCHARGED
60	905101	-	-	-	-	-	-	-	-	-	-	-	R	S	S	-	R	R	R	R	R	R	S	R	R	R	R	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DISCHARGED
61	27828	R	R	R	R	R	R	R	R	R	R	R	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	EXPIRED
62	182908	R	R	R	R	MS	S	S	S	S	S	S	R	S	S	S	S	S	S	-	S	S	S	S	S	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DAMA
63	909472	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	S	S	S	S	S	S	S	S	MS	-	-	-	-	-	-	-	DISCHARGED
64	909520	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	S	S	S	S	S	S	S	S	S	-	-	-	-	-	-	-	EXPIRED
65	908701	-	-	-	-	-	-	-	-	-	-	-	R	R	S	-	R	S	R	R	R	R	R	S	R	R	R	R	R	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DISCHARGED
66	908647	R	R	R	R	R	R	R	R	R	R	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DISCHARGED
67	910265	R	R	R	R	MS	R	R	R	R	R	S	R	S	R	R	R	R	R	R	R	R	R	S	S	R	R	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DISCHARGED
68	126819	-	-	-	-	-	-	-	-	-	-	-	R	S	R	-	S	R	R	R	R	R	R	R	R	R	R	-	-	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DISCHARGED
69	911611	R	R	R	R	S	S	S	R	S	S	S	R	S	R	-	R	R	R	R	R	S	R	R	S	R	R	R	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DAMA
70	876528	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DISCHARGED
71	223050	R	R	R	R	MS	R	S	R	S	S	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	EXPIRED
72	886539	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	EXPIRED
73	881444	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	EXPIRED
74	912877	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	S	R	R	S	R	R	R	R	-	R	S	S	-	-	-	-	EXPIRED
75	912978	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	R	S	R	R	R	R	R	S	R	S	S	S	-	-	-	-	DISCHARGED
76	912929	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DISCHARGED
77	864684	R	R	R	R	S	S	R	S	R	R	S	R	S	S	-	R	R	R	R	R	R	S	S	R	R	R	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DISCHARGED
78	338664	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
79	673246	R	R	R	R	S	R	S	R	S	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DISCHARGED

S.no	MRD NO	NAME	AGE	SEX	DATE OF ADMISSION TO ICU	COMORBIDITIES	RISK FACTORS	DIAGNOSIS	APACHE	DEVICE DAYS-MECHANICAL VENTILATION	DEVICE DAYS-CENTRAL LINE	DEVICE DAYS-URINARY CATHETER	DIRECT EXAMINATION GRAM STAIN	WET MOUNT-INDIA INK/CRYPTOCOCCAL ANTIGEN/BACTERIAL ANTIGEN	KOH MOUNT	ZN STAINING	AFB CULTURE
80	913775	VK	45	M	10-03-2020	HTN	OBESITY	DRUG OVERDOSE	13	-	2	2	-	-	-	-	-
81	398192	PK	41	M	12-03-2020	NO	IMMUNOCOMPROMISED	CARCINOMA STOMACH	15	3	3	3	SP-GNB	-	-	SP-NEG	-
82	348413	ML	46	M	13-03-2020	DM	SEPSIS	ALTERED SENSORIUM	14	6	2	8	ASCITIC FLUID-GNB	-	ASCITIC FL-NFES	NEG	-
83	749388	ML	58	M	14-03-2020	DM	CAD	CHRONIC KIDNEY DISEASE	20	-	-	6	-	-	-	-	-
84	916139	JK	70	F	14-03-2020	DM	SEPSIS	ACUTE KIDNEY INJURY	14	1	1	1	SP-GNB	-	SP-NFES	SP-NEG	-
85	916187	RS	23	M	14-03-2020	PULMONARY	SMOKING	PLEURAL EFFUSION	15	-	-	3	SP-GPC	-	SP-BYLC	SP-NEG	-
86	415656	PK	71	M	14-03-2020	CARDIOVASCULAR	SEPSIS	CARDIOVASCULAR ACCIDENT	15	3	-	4	ET-GPC,GNB	-	-	ET-NEG	-
87	916639	PS	54	M	16-03-2020	HTN	CAD	OPD CVA ,BREATHING DIFFICULTY	10	6	-	8	SP-GNB	-	SP-NFES	SP-NEG	-
88	916169	SK	27	F	17-03-2020	NO	FAMILY HISTORY	MEDULLARY THYROID CARCINOMA	22	-	-	6	NEG	-	ET-HYALINE SEPTATE FUNGAL HYPHAE	ET-NEG	-
89	606618	SR	28	F	19-03-2020	DM	SEPSIS	CHRONIC KIDNEY DISEASE	8	14	6	14	ET-GNB	-	ET-NFES	ET-NEG	-
90	919324	N	58	F	21-03-2020	NO	IMMUNOCOMPROMISED	OBSTRUCTIVE JAUNDICE	11	-	-	8	-	-	-	-	-
91	77966	AS	70	M	22-03-2020	PULMONARY	ELDERLY	B/L PNEUMONITIS	16	-	-	9	SP-GNB	-	-	-	-
92	918641	MS	69	M	23-03-2020	HTN	OBESITY	CARDIOVASCULAR ACCIDENT	11	-	-	24	-	-	-	-	-
93	916078	MK	50	F	23-03-2020	PULMONARY	SMOKING	PNEUMONITIS	18	2	2	2	ET-GNCB	-	ET-BYLC WITH PH	ET-NEG	-
94	588315	MS	69	M	24-03-2020	DM	SEPSIS	SEPSIS	11	-	-	-	PUS-GNB	-	-	-	-
95	913775	VK	45	M	25-03-2020	CARDIOVASCULAR	OBESITY	HEART FAILURE,EJECTION FRACTION 40	12	-	-	2	-	-	-	-	-
96	816658	DS	55	M	26-03-2020	DM	SEPSIS	DIABETIC FOOT	12	-	13	17	-	-	-	-	-
97	158446	R	34	F	29-03-2020	NO	IMMUNOCOMPROMISED	ACUTE GASTROENTERITIS	13	-	-	5	-	-	-	-	-
98	776730	JS	50	M	29-03-2020	NO	IMMUNOCOMPROMISED	JAUNDICE	10	-	5	-	-	-	-	-	-
99	919227	JS	32	M	31-03-2020	NO	MALNUTRITION	ROAD SIDE ACCIDENT	10	-	-	1	-	-	-	-	-
100	395091	DK	60	F	31-03-2020	DM	SEPSIS	ACUTE KIDNEY INJURY WITH SEPSIS	10	-	-	-	-	-	-	-	-
101	920523	HS	28	M	31-03-2020	CARDIOVASCULAR	OBESITY	CHRONIC OBSTRUCTIVE ARTERY DISEASE	17	-	-	-	ET-NO M/O SEEN	-	ET-NFES	-	-
102	920820	HK	82	F	31-03-2020	CARDIOVASCULAR	OBESITY	CARDIOVASCULAR ACCIDENT	10	-	-	-	SP-GNB	-	SP-BYLC WITH PH	-	-
103	920944	AK	75	F	02-04-2020	DM	SEPSIS	DIABETIC KETOACIDOSIS	14	-	-	2	WOUND SWAB-GNB	-	-	-	-
104	894755	GK	36	F	02-04-2020	CHRONIC KIDNEY DISEASE	CAD	CHRONIC KIDNEY DISEASE	10	-	-	2	CSF-NO M/O SEEN ET-NO M/O SEEN	-	ET-NFES	CSF-NEG, ET-NEG	-
105	895036	BS	65	M	03-04-2020	NO	IMMUNOCOMPROMISED	CARCINOMA PERIFORM FOSSA	11	-	3	6	-	-	-	-	-
106	601246	BD	68	M	04-04-2020	DM	SEPSIS	CHRONIC KIDNEY DISEASE	22	-	4	4	-	-	-	-	-
107	917500	PR	60	F	05-04-2020	DM	SEPSIS	DIABETIC KETOSIS	10	-	-	4	-	-	-	-	-
108	921138	KD	55	M	05-04-2020	CHRONIC KIDNEY DISEASE	SEPSIS	CHRONIC KIDNEY DISEASE	21	-	-	4	SP-BYLC WITH PH	-	SP-BYLC WITH PH	-	-
109	177385	RK	90	M	06-04-2020	NO	ELDERLY	FEVER	23	4	4	4	ET-GNB	-	ET-NFES	-	-
110	885024	VJ	62	M	06-04-2020	CARDIOVASCULAR	OBESITY	CORONARY VASCULAR DISEASE	21	-	5	5	-	-	-	-	-
111	891945	RK	60	M	08-04-2020	NO	ELDERLY	ACUTE PANCREATITIS	19	-	4	4	SP-GNB	-	SP-BYLC WITH PH	SP-NEG	-
112	921261	AS	62	M	08-04-2020	NO	ELDERLY	CHRONIC LIVER DISEASE	21	-	5	6	-	-	-	-	-
113	430749	JS	67	M	08-04-2020	CHRONIC KIDNEY DISEASE	SEPSIS	CHRONIC KIDNEY DISEASE	20	8	-	11	ET-GNB	-	ET-NFES	ET-NEG	-
114	916550	RG	58	F	09-04-2020	DM,HTN	CAD	CHRONIC KIDNEY DISEASE	13	-	-	-	CSF-NO M/O SEEN	NEG	-	URINE-NEG	-
115	921738	BS	64	M	10-04-2020	DM	SEPSIS	CARDIOVASCULAR ACCIDENT	15	-	-	4	-	-	-	-	-
116	921777	JS	49	M	11-04-2020	CHRONIC KIDNEY DISEASE	SEPSIS	DIABETIC KETOACIDOSIS,PAIN ABDOMEN,SHOCK	18	-	-	2	-	-	-	-	-
117	922476	MS	62	M	15-04-2020	DM	SEPSIS	AFI WITH CLD	12	-	-	3	CSF-NO M/O SEEN	NEG	-	CSF-NEG	-
118	907582	SS	59	M	16-04-2020	DM,HTN	CAD	CHRONIC KIDNEY DISEASE	22	3	-	6	ET-GNB	-	ET-NFES	-	-
119	922517	SK	36	F	16-04-2020	CHRONIC KIDNEY DISEASE	OBESITY	CHRONIC KIDNEY DISEASE	19	5	-	5	-	-	-	-	-
120	922653	M	45	F	16-04-2020	DM,HTN	SEPSIS	ACUTE GASTROENTERITIS	10	-	-	5	-	-	-	-	-
121	911711	VK	66	M	17-04-2020	HTN,DM	IMMOBILISATION	CHRONIC KIDNEY DISEASE	21	-	-	4	-	-	-	-	-
122	922611	BS	63	M	17-04-2020	DM	SEPSIS	ALTERED SENSORIUM	15	-	-	-	-	-	-	OTHER-NEG	-
123	923355	RA	32	F	23-04-2020	HTN	DEVICE RELATED	POST LSCS,DECREASE URINE OUTPUT	15	-	-	4	OTHER-NEG	-	-	-	-
124	923527	S	60	M	24-04-2020	DM	SEPSIS	DIABETIC FOOT	15	-	-	6	CSF-NO M/O SEEN	NEG	-	-	-
125	774837	SB	56	F	24-04-2020	DM	SEPSIS	CKD	23	-	-	-	SP-GNB	-	-	-	-
126	922784	PR	58	F	26-04-2020	NO	IMMUNOCOMPROMISED	PAIN ABDOMEN	15	7	7	7	-	-	-	-	-
127	686357	M	34	F	26-04-2020	NO	IMMUNOCOMPROMISED	CARCINOMA CERVIX	12	-	-	-	-	-	-	-	-
128	916012	SS	75	M	29-04-2020	PULMONARY	ELDERLY	FEVER WITH BREATHING DIFFICULTY	12	-	-	-	-	-	-	-	-
129	924180	RK	73	F	29-04-2020	DM	SEPSIS	CHRONIC KIDNEY DISEASE	16	-	2	2	ET-NO M/O SEEN	-	-	-	-
130	922020	RS	27	M	03-05-2020	NO	MALNUTRITION	RSA,LEFT LEG WOUND ACUTE GASTROENTERITIS	15	5	1	1	CSF-NO M/O SEEN ET-GNB	-	ET-BYLC	ET-NEG	-
131	867137	RR	69	M	06-05-2020	DM	SEPSIS	ACUTE CVA	14	1	-	1	SP-GPC	-	SP-NFES	SP-NEG	-
132	923505	GS	27	M	06-05-2020	NO	IMMUNOCOMPROMISED	TUBERCULAR MENINGITIS	10	4	-	4	-	INDIA INK-NEG, CRYPTO ANTIGEN-NEG	-	-	-
133	200340	VK	69	M	09-05-2020	DM	SEPSIS	CAD,CKD	10	3	3	3	ET-GNB	-	ET-BYLC WITH PH	ET-NEG	-
134	925900	MS	65	M	10-05-2020	HTN	OBESITY	CORONARY VASCULAR DISEASE	13	-	-	4	SP-GNB	-	ET-BYLC WITH PH	ET-NEG	-
135	925897	GS	42	M	10-05-2020	DM	SEPSIS	CHRONIC KIDNEY DISEASE	10	-	-	7	ET-GNB	-	ET-NFES	ET-NEG	-
136	805324	NA	65	M	12-05-2020	CHRONIC KIDNEY DISEASE	SEPSIS	CKD-5	15	-	9	9	ET-GNB	-	-	ET-NEG	-
137	59242	MS	61	M	13-05-2020	DM	SEPSIS	RT LEG CELLULITIS	13	-	4	4	-	-	-	-	-
138	926205	PK	70	M	13-05-2020	NO	ELDERLY	FACIAL PALSY	15	-	29	30	-	-	-	-	-
139	389110	TS	67	M	14-05-2020	DM	SEPSIS	CKD	15	-	-	3	-	-	-	-	-
140	926551	CS	58	M	15-05-2020	NO	MALNUTRITION	AFI	13	8	10	10	-	-	-	-	-
141	817714	GS	39	M	17-05-2020	DM	SEPSIS	CKD	14	2	-	3	-	-	-	-	-
142	927202	AS	35	M	19-05-2020	NO	MALNUTRITION	ACUTE PANCREATITIS	15	-	-	3	-	-	-	-	-
143	927724	KK	48	M	21-05-2020	CARDIOVASCULAR	OBESITY	AFI WITH SHOCK	17	-	-	8	SP-BYLC	-	SP-BYLC WITH PH	SP-NEG	-
144	928208	GK	42	F	22-05-2020	NO	IMMUNOCOMPROMISED	CARCINOMA BREAST	14	8	-	10	-	-	-	-	-
145	927727	SR	65	F	24-05-2020	DM	SEPSIS	CKD	13	1	-	2	-	-	-	-	-
146	928552	MK	50	F	24-05-2020	DM	REINTUBATION	CKD	14	-	-	3	CSF-NO M/O SEEN	INDIA INK-NEG	-	-	-
147	875629	BS	59	M	27-05-2020	CHRONIC KIDNEY DISEASE	SEPSIS	CKD	12	4	2	4	-	-	-	-	-
148	929298	JK	55	F	28-05-2020	DM	SEPSIS	AKI	13	1	9	1	-	-	-	-	-
149	905101	GS	64	M	30-05-2020	NO	ELDERLY	CLD	12	3	9	8	-	-	-	-	-
150	930461	TK	28	F	31-05-2020	HTN	IMMUNOCOMPROMISED	POST LSCS,SEIZURES	16	5	-	3	-	-	-	-	-
151	930912	PS	68	M	02-06-2020	DM	SEPSIS	CKD	12	-	-	5	SP-GPC,PLEURAL FL-NO M/O SEEN	-	-	SP-NEG	-
152	931262	FS	34	M	03-06-2020	NO	MALNUTRITION	OPC POISONING	15	-	-	6	ET-GNB	-	-	-	-
153	893504	ML	67	M	04-06-2020	CHRONIC KIDNEY DISEASE	SEPSIS	CKD	12	-	-	-	-	-	-	-	-
154	931556	DS	46	M	04-06-2020	NO	IMMUNOCOMPROMISED	CLD	15	-	26	26	CSF-NO M/O SEEN, ET-GNB	-	ET-BYLC WITH PH	CSF-NEG,ET-NEG	-
155	932247	AK	46	F	06-06-2020	DM	SEPSIS	DKA	17	-	6	-	-	-	-	-	-
156	932221	MS	77	M	07-06-2020	HTN	OBESITY	CKD	14	-	4	5	-	-	-	-	-
157	932286	SK	60	F	07-06-2020	NO	OBESITY	PARAPLEGIA	13	-	5	6	-	-	-	-	-
158	527028	CB	67	F	08-06-2020	HTN	ELDERLY	CVA	15	-	5	10	-	-	-	-	-

S.no	MRD NO	FUNGAL CULTURE	CULTURE URINE	BODY FLUID	BLOOD	ET/SPUTUM/BAL	SOFT TISSUE INFECTION	HOSPITAL /COMMUNITY ACQUIRED INFECTION	VAP/CLABSI/CAUTI
80	913775	-	NG	-	STAPHYLOCOCCUS AUREUS	-	-	COMMUNITY	-
81	398192	-	NG	-	NG	SP-E COLI	-	COMMUNITY	-
82	348413	-	-	ASCITIC FLUID-E COLI	-	-	-	COMMUNITY	-
83	749388	-	-	-	ACINETOBACTER BAUMANNII	-	PUS-NG	HOSPITAL	-
84	916139	-	NG	-	NG	SP-KLEBSIELLA PNEUMONIAE	-	COMMUNITY	-
85	916187	-	NG	-	STAPHYLOCOCCUS AUREUS	SP-NF	-	COMMUNITY	-
86	415656	-	-	-	NG	ET-STAPHYLOCOCCUS AUREUS,KLEBSIELLA PNEUMONIAE	-	COMMUNITY	-
87	916639	-	CANDIDA LUSITANIAE	-	STENOTROPHOMONAS MALTOPHILIA	SP-KLEBSIELLA PNEUMONIAE	-	COMMUNITY	-
88	916169	ET-ASPERGILLUS FLAVUS	-	NG	ET-NSG	-	NO	-	-
89	606618	-	KLEBSIELLA PNEUMONIAE	-	NG	ET-KLEBSIELLA PNEUMONIAE	-	HOSPITAL	-
90	919324	-	-	-	ALCALIGENES FAECALIS	-	-	HOSPITAL	-
91	77966	-	NG	-	NG	SP-E COLI	-	COMMUNITY	-
92	918641	-	NG	-	NG	SP-E COLI	-	COMMUNITY	-
93	916078	-	NG	-	NG	ET-ACINETOBACTER BAUMANNII	-	HOSPITAL	-
94	588315	-	NG	-	NG	-	PUS- E COLI	COMMUNITY	-
95	913775	-	NG	-	STAPHYLOCOCCUS AUREUS	-	-	HOSPITAL	-
96	816658	-	NG	-	NG	-	PUS-ENTEROCOCCUS FAECALIS	COMMUNITY	-
97	158446	-	-	-	E COLI	-	-	COMMUNITY	-
98	776730	-	-	-	KLEBSIELLA PNEUMONIAE	-	-	HOSPITAL	-
99	919227	-	KLEBSIELLA PNEUMONIAE	-	NG	-	-	HOSPITAL	-
100	395091	-	E COLI	-	E COLI	-	-	COMMUNITY	-
101	920523	-	-	-	STAPHYLOCOCCUS AUREUS	ET -NSG	-	COMMUNITY	-
102	920820	-	NG	-	NG	SP-E COLI	-	COMMUNITY	-
103	920944	-	NG	-	NG	-	WOUND SWAB-PSEUDOMONAS AERUGINOSA	HOSPITAL	-
104	894755	-	PROTEUS MIRABILIS, KLEBSIELLA PNEUMONIAE	-	NG	ET-CANDIDA TROPICALIS	-	HOSPITAL	-
105	895036	-	-	-	KLEBSIELLA PNEUMONIAE	-	-	COMMUNITY	-
106	601246	-	ENTEROCOCCUS FAECIUM	-	-	-	-	COMMUNITY	-
107	917500	-	KLEBSIELLA PNEUMONIAE	-	-	-	-	COMMUNITY	-
108	921138	-	CANDIDA ALBICANS	-	NG	-	WOUND SWAB-E COLI	COMMUNITY	-
109	177385	-	NG	-	STAPHYLOCOCCUS AUREUS	ET-KLEBSIELLA PNEUMONIAE	-	COMMUNITY	-
110	885024	-	E COLI	-	-	-	-	COMMUNITY	-
111	891945	-	CANDIDA STELLATOIDEA AND ENTEROCOCCUS FAECIUM	-	KLEBSIELLA PNEUMONIAE	SP-KLEBSIELLA PNEUMONIAE	-	HOSPITAL	-
112	921261	-	-	ASCITIC FL-ENTEROCOCCUS FAECIUM	-	-	-	COMMUNITY	-
113	430749	-	NSG	-	NG	ET-KLEBSIELLA PNEUMONIAE	-	HOSPITAL	-
114	916550	URINE-CANDIDA TROPICALIS	KLEBSIELLA PNEUMONIAE	-	NG	-	-	COMMUNITY	-
115	921738	-	E COLI	-	NG	-	-	COMMUNITY	-
116	921777	-	NG	-	NG	-	PUS-STAPH AUREUS	HOSPITAL	-
117	922476	-	NG	NG	-	-	WOUND SWAB-STAPH AUREUS	HOSPITAL	-
118	907582	-	CANDIDA TROPICALIS	-	NG	ET-KLEBSIELLA PNEUMONIAE	-	COMMUNITY	-
119	922517	-	E COLI	-	NG	-	-	COMMUNITY	-
120	922653	-	E COLI	-	-	-	-	COMMUNITY	-
121	911711	-	ENTEROBACTER AEROGENES	-	PSEUDOMONAS AERUGINOSA	-	-	HOSPITAL	-
122	922611	-	-	-	STAPHYLOCOCCUS AUREUS	-	WOUND SWAB-STAPH AUREUS	COMMUNITY	-
123	923355	-	ENTEROCOCCUS FAECIUM	-	CANDIDA LUSITANIAE	-	-	HOSPITAL	CLABSI+ CAUTI
124	923527	-	-	-	NG	SP-KLEBSIELLA PNEUMONIAE	-	HOSPITAL	-
125	774837	-	-	-	NG	SP-KLEBSIELLA PNEUMONIAE	-	COMMUNITY	-
126	922784	-	NG	-	SERRATIA LIQUEFACIENS	-	-	HOSPITAL	-
127	686357	-	NG	-	NG	-	PUS-E COLI	COMMUNITY	-
128	916012	-	E COLI	-	E COLI	-	-	COMMUNITY	-
129	924180	-	CANDIDA TROPICALIS	-	KLEBSIELLA PNEUMONIAE	ET-NG	-	HOSPITAL	-
130	922020	-	NG	NG	ACINETOBACTER BAUMANNII	ET-KLEBSIELLA PNEUMONIAE	-	HOSPITAL	-
131	867137	-	NG	-	PSEUDOMONAS STUTZERI	SP-NF	-	HOSPITAL	-
132	923505	-	PSEUDOMONAS AERUGINOSA	-	-	-	-	HOSPITAL	-
133	200340	-	KLEBSIELLA PNEUMONIAE	-	E COLI	ET-KLEBSIELLA PNEUMONIAE	-	COMMUNITY	-
134	925900	-	NG	-	NG	ET-KLEBSIELLA PNEUMONIAE	-	COMMUNITY	-
135	925897	-	-	-	NG	ET-PSEUDOMONAS LUTEOLA	-	HOSPITAL	-
136	805324	-	KLEBSIELLA PNEUMONIAE	-	NG	ET-KLEBSIELLA PNEUMONIAE	WOUND SWAB-KLEBSIELLA PNEUMONIAE	COMMUNITY	-
137	59242	-	NG	-	NG	-	ENTEROCOCCUS	COMMUNITY	-
138	926205	-	E COLI	-	E COLI	-	-	COMMUNITY	-
139	389110	ET-CANDIDA TROPICALIS	-	NG	NG	ET-PROTEUS MIRABILIS, KLEBSIELLA PNEUMONIAE	PUS-NG	HOSPITAL	-
140	926551	-	NG	-	E COLI	-	-	COMMUNITY	-
141	817714	-	KLEB PNEUMONIAE	-	NG	-	-	COMMUNITY	-
142	927202	-	-	-	KLEBSIELLA PNEUMONIAE	-	-	COMMUNITY	-
143	927724	-	NG	-	KLEBSIELLA PNEUMONIAE	SP-NF	-	HOSPITAL	-
144	928208	-	PSEUDOMONAS AERUGINOSA	-	NG	-	-	HOSPITAL	-
145	927727	-	CANDIDA TROPICALIS	-	CITROBACTER KOSERI	-	-	COMMUNITY	-
146	928552	-	KLEBSIELLA PNEUMONIAE	CSF-NG	SPHINGOMONAS PAUCIMOBILIS,ENTEROCOCCUS FAECALIS	-	-	HOSPITAL	-
147	875629	-	KLEBSIELLA PNEUMONIAE	-	NG	-	-	COMMUNITY	-
148	929298	-	-	-	E COLI	-	-	COMMUNITY	-
149	905101	-	NG	-	-	-	WOUND SWAB-KLEBSIELLA PNEUMONIAE	COMMUNITY	-
150	930461	-	NG	-	NG	-	VAGINAL SWAB-E COLI	COMMUNITY	-
151	930912	-	ENTEROCOCCUS FAECIUM	PL FL-NG	NG	SP-NF	-	COMMUNITY	-
152	931262	-	NG	-	STAPHYLOCOCCUS EPIDERMIDIS	ET- E COLI	-	HOSPITAL	-
153	893504	-	NG	-	NG	ET-KLEBSIELLA PNEUMONIAE	-	COMMUNITY	-
154	931556	-	NG	-	NG	ET-ACINETOBACTER BAUMANNII	-	HOSPITAL	-
155	932247	-	-	-	E COLI	-	-	COMMUNITY	-
156	932221	-	E COLI	-	NG	-	-	HOSPITAL	-
157	932286	-	NG	-	STAPHYLOCOCCUS AUREUS	-	-	HOSPITAL	-
158	527028	-	PSEUDOMONAS AERUGINOSA	-	NG	-	-	HOSPITAL	-

S.no	MRD NO	MDR	XDR	PDR	MRSA/VRE	ESBL(CONFIRMED)	ESBL(PROBABLE)	MBL (PROBABALE)	MBL (CONFIRMED)	Amp C (PROBABALE)	Amp C (CONFIRMED)
80	913775	MDR	-	-	-	-	ESBL	MBL	-	-	-
81	398192	MDR	XDR	-	-	ESBL	ESBL	MBL	-	-	-
82	348413	MDR	-	-	-	-	ESBL	MBL	-	-	-
83	749388	MDR	XDR	-	-	-	ESBL	MBL	-	AMP C	-
84	916139	MDR	XDR	-	-	-	ESBL	MBL	-	-	-
85	916187	MDR	-	-	MRSA	-	ESBL	MBL	-	-	-
86	415656	MDR	XDR	-	MRSA	-	ESBL	MBL	-	-	-
87	916639	MDR	XDR	-	-	ESBL	ESBL	MBL	-	-	-
88	916169	-	-	-	-	-	-	-	-	-	-
89	606618	MDR	XDR	-	-	ESBL	ESBL	MBL	MBL	AMP C	FLATTENING OF ZONE
90	919324	NO	NO	-	-	-	ESBL	MBL	-	-	-
91	77966	MDR	-	-	-	-	ESBL	MBL	MBL	-	-
92	918641	MDR	-	-	-	ESBL	ESBL	MBL	-	-	-
93	916078	MDR	XDR	-	-	-	ESBL	MBL	-	AMP C	DISTORTION OF ZONE
94	588315	NO	NO	-	-	ESBL	ESBL	MBL	MBL	-	-
95	913775	MDR	-	-	-	-	ESBL	MBL	-	-	-
96	816658	NO	NO	-	-	-	ESBL	MBL	-	-	-
97	158446	MDR	XDR	-	-	-	ESBL	MBL	-	AMP C	-
98	776730	NO	NO	-	-	ESBL	ESBL	MBL	MBL	AMP C	FLATTENING OF ZONE
99	919227	MDR	XDR	-	-	-	ESBL	MBL	-	-	FLATTENING OF ZONE
100	395091	MDR	-	-	-	-	ESBL	MBL	MBL	-	-
101	920523	MDR	XDR	-	-	-	ESBL	MBL	-	-	-
102	920820	MDR	XDR	-	-	ESBL	ESBL	MBL	MBL	-	-
103	920944	NO	NO	-	-	-	ESBL	MBL	-	-	-
104	894755	MDR	-	-	-	-	ESBL	MBL	-	-	-
105	895036	MDR	XDR	-	-	-	ESBL	MBL	-	-	-
106	601246	MDR	XDR	-	-	-	ESBL	MBL	-	-	-
107	917500	NO	NO	-	-	-	ESBL	MBL	MBL	-	-
108	921138	NO	NO	-	-	-	ESBL	MBL	MBL	-	-
109	177385	MDR	XDR	-	-	ESBL	ESBL	MBL	MBL	-	-
110	885024	MDR	-	-	-	-	ESBL	MBL	MBL	AMP C	FLATTENING OF ZONE
111	891945	MDR	XDR	-	-	ESBL	ESBL	MBL	MBL	AMP C	DISTORTION OF ZONE
112	921261	NO	NO	-	-	-	ESBL	-	-	-	-
113	430749	MDR	XDR	-	-	ESBL	ESBL	-	-	AMP C	DISTORTION OF ZONE
114	916550	MDR	XDR	-	-	ESBL	ESBL	-	-	-	-
115	921738	NO	NO	-	-	-	ESBL	-	-	-	-
116	921777	MDR	-	-	MRSA	-	ESBL	-	-	-	-
117	922476	NO	NO	-	MRSA	-	ESBL	-	-	-	-
118	907582	MDR	XDR	-	-	ESBL	ESBL	MBL	MBL	-	-
119	922517	NO	NO	-	-	-	ESBL	-	-	-	-
120	922653	NO	NO	-	-	-	ESBL	-	-	-	-
121	911711	MDR	XDR	-	-	-	ESBL	-	-	-	-
122	922611	MDR	-	-	MRSA	-	ESBL	-	-	-	-
123	923355	NO	NO	-	-	-	ESBL	-	-	-	-
124	923527	MDR	XDR	-	-	-	ESBL	-	-	-	-
125	774837	MDR	XDR	-	-	ESBL	ESBL	-	MBL	-	-
126	922784	MDR	XDR	-	-	-	ESBL	-	-	-	-
127	686357	MDR	XDR	-	-	ESBL	ESBL	MBL	MBL	-	-
128	916012	MDR	-	-	-	-	ESBL	MBL	MBL	-	-
129	924180	MDR	XDR	-	-	-	ESBL	-	-	-	-
130	922020	MDR	XDR	-	-	ESBL	ESBL	MBL	MBL	-	-
131	867137	NO	NO	-	-	-	ESBL	-	-	-	-
132	923505	MDR	XDR	-	-	ESBL	ESBL	-	-	-	-
133	200340	MDR	XDR	-	-	ESBL	ESBL	-	-	-	-
134	925900	MDR	XDR	-	-	ESBL	ESBL	-	-	-	-
135	925897	MDR	XDR	-	-	-	ESBL	MBL	-	-	-
136	805324	MDR	XDR	-	-	ESBL	ESBL	MBL	-	-	DISTORTION OF ZONE
137	59242	MDR	-	-	-	-	ESBL	MBL	-	-	-
138	926205	MDR	-	-	-	-	ESBL	MBL	-	-	-
139	389110	MDR	-	-	-	-	ESBL	MBL	-	-	-
140	926551	MDR	XDR	-	-	-	ESBL	MBL	-	-	-
141	817714	MDR	XDR	-	-	-	ESBL	MBL	-	-	-
142	927202	MDR	XDR	-	-	ESBL	ESBL	MBL	-	AMP C	DISTORTION OF ZONE
143	927724	MDR	-	-	-	-	ESBL	MBL	-	AMP C	-
144	928208	MDR	-	-	-	-	ESBL	MBL	-	-	-
145	927727	NO	NO	-	-	-	ESBL	MBL	-	-	-
146	928552	MDR	XDR	-	-	-	ESBL	MBL	-	AMP C	-
147	875629	MDR	XDR	-	-	-	ESBL	MBL	-	AMP C	-
148	929298	MDR	XDR	-	-	-	ESBL	MBL	-	-	-
149	905101	MDR	XDR	-	-	-	ESBL	MBL	-	AMP C	-
150	930461	NO	NO	-	-	-	ESBL	MBL	-	-	-
151	930912	MDR	XDR	-	-	-	ESBL	MBL	-	-	-
152	931262	NO	NO	-	-	ESBL	ESBL	MBL	-	-	-
153	893504	MDR	XDR	-	-	ESBL	ESBL	MBL	-	-	-
154	931556	MDR	XDR	-	-	-	ESBL	MBL	-	-	-
155	932247	MDR	XDR	-	-	-	ESBL	MBL	-	-	-
156	932221	MDR	XDR	-	-	-	ESBL	MBL	-	-	-
157	932286	NO	NO	-	MRSA	-	ESBL	MBL	-	-	-
158	527028	MDR	XDR	-	-	-	ESBL	MBL	-	-	-

RESPIRATORY

S.no	AMP	TIC	AMK	GEN	COT	CAZ	CPM	LEVO	MIN	CIP	TZP	CSL	AMC	IPM	ERT	MEM	DOR	CTR	TGC	PB
80	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
81	R	R	S	R	R	R	R	R	R	R	R	R	R	S	S	S	R	R	S	-
82	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
83	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
84	R	R	S	S	R	R	R	R	R	R	R	R	R	R	R	R	R	R	-	-
85	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
86	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
87	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	S
88	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
89	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	S
90	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
91	R	R	S	S	S	R	S	-	-	-	R	R	R	R	R	R	-	S	S	-
92	R	R	S	S	S	R	S	R	R	R	R	R	R	R	R	R	R	S	S	-
93	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	S	-
94	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
95	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
96	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
97	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
98	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
99	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
101	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
102	R	R	S	S	R	R	-	-	S	R	R	R	R	S	-	S	S	R	S	-
103	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
104	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
105	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
106	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
107	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
108	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
109	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	-
110	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	-
112	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
113	R	R	R	R	S	R	R	R	R	R	R	R	R	R	R	R	R	R	R	-
114	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
115	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
116	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
117	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
118	-	-	S	S	R	R	R	R	R	R	R	R	R	R	R	R	R	R	-	-
119	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
120	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
121	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
122	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
123	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
124	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	-	-
125	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	-	-
126	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
127	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
128	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
129	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
130	R	R	S	S	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	-
131	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
132	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
133	R	R	R	R	R	R	R	R	R	R	R	R	R	MS	R	R	R	R	R	-
134	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	-
135	R	R	R	R	R	R	R	R	R	R	R	R	S	R	R	R	R	R	S	-
136	R	R	S	S	R	R	R	R	R	R	R	R	R	R	R	R	R	R	-	-
137	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
138	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
139	R	R	S	S	S	R	R	R	R	R	S	S	R	MS	R	R	R	R	R	-
140	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
141	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
142	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
143	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
144	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
145	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
146	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
147	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
148	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
149	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
150	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
151	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
152	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	-
153	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	-
154	R	R	R	R	R	R	R	R	S	R	R	R	R	R	R	R	R	R	S	-
155	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
156	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
157	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
158	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

PUS

S.no	AMP	TIC	AMK	GEN	COT	CAZ	CPM	LEVO	MIN	CIP	TZP	CSL	AMC	IPM	ERT	MEM	CTR/CTX	PB	TG
80	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
81	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
82	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
83	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
84	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
85	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
86	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	S	-
87	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
88	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
89	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
90	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
91	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
92	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
93	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
94	R	R	S	S	R	S	S	S	S	R	S	S	S	S	S	S	S	-	-
95	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
96	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
97	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
98	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
99	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
101	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
102	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
103	S	MS	S	S	S	S	S	S	S	S	MS	S	R	S	S	S	R	-	-
104	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
105	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
106	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
107	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
108	S	R	S	S	R	R	S	S	S	R	S	S	R	S	S	S	R	-	-
109	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
110	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
112	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
113	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
114	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
115	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
116	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
117	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
118	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
119	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
120	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
121	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
122	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
123	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
124	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
125	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
126	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
127	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	S
128	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
129	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
130	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
131	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
132	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
133	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
134	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
135	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
136	R	R	S	R	R	R	R	R	R	R	R	R	R	R	R	R	R	-	R
137	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
138	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
139	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
140	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
141	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
142	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
143	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
144	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
145	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
146	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
147	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
148	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
149	R	R	R	S	R	R	R	R	R	R	R	R	R	MS	R	R	R	-	-
150	S	S	S	S	S	S	S	S	S	R	S	S	S	S	S	S	R	-	-
151	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
152	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
153	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
154	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
155	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
156	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
157	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
158	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

S.no	AMP	TIC	AMK	GEN	COT	CEP	CXM
80	-	-	-	-	-	-	-
81	-	-	-	-	-	-	-
82	-	-	-	-	-	-	-
83	-	-	-	-	-	-	-
84	-	-	-	-	-	-	-
85	-	-	-	-	-	-	-
86	-	-	-	-	-	-	-
87	-	-	-	-	-	-	-
88	-	-	-	-	-	-	-
89	R	R	R	R	R	R	R
90	-	-	-	-	-	-	-
91	-	-	-	-	-	-	-
92	-	-	-	-	-	-	-
93	-	-	-	-	-	-	-
94	-	-	-	-	-	-	-
95	-	-	-	-	-	-	-
96	-	-	-	-	-	-	-
97	R	R	R	R	R	R	R
98	-	-	-	-	-	-	-
99	R	R	R	R	R	R	R
100	R	R	S	S	S	R	R
101	-	-	-	-	-	-	-
102	-	-	-	-	-	-	-
103	-	-	-	-	-	-	-
104	R	S	S	S	R	S	S
105	-	-	-	-	-	-	-
106	-	-	-	-	-	-	-
107	S	R	S	S	R	R	S
108	-	-	-	-	-	-	-
109	-	-	-	-	-	-	-
110	R	R	S	R	R	R	R
111	-	-	-	-	-	-	-
112	-	-	-	-	-	-	-
113	-	-	-	-	-	-	-
114	R	R	R	R	R	R	R
115	S	S	S	R	R	R	S
116	-	-	-	-	-	-	-
117	-	-	-	-	-	-	-
118	-	-	-	-	-	-	-
119	S	S	S	S	S	R	S
120	R	S	S	S	S	R	S
121	R	R	S	R	R	R	R
122	-	-	-	-	-	-	-
123	-	-	-	-	-	-	-
124	-	-	-	-	-	-	-
125	-	-	-	-	-	-	-
126	-	-	-	-	-	-	-
127	-	-	-	-	-	-	-
128	R	R	S	S	R	R	R
129	-	-	-	-	-	-	-
130	-	-	-	-	-	-	-
131	-	-	-	-	-	-	-
132	R	R	R	R	R	R	R
133	R	R	S	R	R	R	R
134	-	-	-	-	-	-	-
135	-	-	-	-	-	-	-
136	R	R	R	R	R	R	R
137	-	-	-	-	-	-	-
138	R	R	S	S	S	R	R
139	-	-	-	-	-	-	-
140	-	-	-	-	-	-	-
141	R	R	S	S	R	R	R
142	-	-	-	-	-	-	-
143	-	-	-	-	-	-	-
144	R	MS	S	S	R	R	R
145	-	-	-	-	-	-	-
146	R	R	R	R	R	R	R
147	R	R	R	R	R	R	R
148	-	-	-	-	-	-	-
149	-	-	-	-	-	-	-
150	-	-	-	-	-	-	-
151	-	-	-	-	-	-	-
152	-	-	-	-	-	-	-
153	-	-	-	-	-	-	-
154	-	-	-	-	-	-	-
155	-	-	-	-	-	-	-
156	R	R	R	R	R	R	R
157	-	-	-	-	-	-	-
158	R	R	R	R	R	R	R

S.no	MRD NO	ANTIMICROBIAL SENSITIVITY URINE											BLOOD/BODY FLUID																					GPC														ANTIFUNGAL SENSITIVITY					OUTCOME
		CTR	CAZ	NX	OF	NIT	TZP	CSL	AMC	ERT	IPM	FOS	AMP	AMK	GEN	LEVO	CIP	COT	CXM	CAZ	CTR	CPM	CSL	AMC	TZP	IPM	MEM	ERT	DOR	-	MIN	TGC	COL	PEN	DPT	CIP	LEV	GEN/GHL	COT	TET	RIF	NIT	TEC	VAN	LZ	ERY	CLINDA	FLU	VORI	AMPHO	CASPO	MICA	
80	913775	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	R	-	R	R	S	-	S	S	-	-	-	-	-	-	-	-	-	-	-	DAMA
81	398192	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DAMA
82	348413	-	-	-	-	-	-	-	-	-	-	-	R	S	R	R	R	R	R	R	R	S	S	MS	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	EXPIRED
83	749388	-	-	-	-	-	-	-	-	-	-	-	R	R	R	R	R	R	R	R	R	R	R	-	R	R	R	-	-	-	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DISCHARGED
84	916139	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DAMA
85	916187	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	R	S	R	R	R	R	R	S	-	S	S	S	-	-	-	-	-	-	-	DAMA
86	415656	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	R	S	R	R	S	R	S	S	-	S	S	S	-	-	-	-	-	-	-	DAMA
87	916639	-	-	-	-	-	-	-	-	-	-	15	-	-	-	S	-	S	-	R	-	-	-	-	-	-	-	-	-	-	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	S	S	S	-	-	DISCHARGED
88	916169	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
89	606618	R	R	R	R	R	R	R	R	R	R	R	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DISCHARGED
90	919324	-	-	-	-	-	-	-	-	-	-	-	-	-	S	R	R	-	-	S	-	MS	S	-	S	-	-	-	-	-	R	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DISCHARGED
91	77966	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	EXPIRED
92	918641	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DISCHARGED
93	916078	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DAMA
94	588315	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DAMA
95	913775	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	R	-	R	R	S	-	S	S	-	-	-	-	-	-	-	-	-	-	-	EXPIRED
96	816658	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	S	-	S	S	S	-	R	-	-	S	S	S	MS	-	-	-	-	-	-	DISCHARGED
97	158446	R	R	R	R	MS	R	S	R	R	S	S	R	S	S	R	R	R	R	R	R	R	R	R	R	R	R	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DAMA
98	776730	-	-	-	-	-	-	-	-	-	-	-	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DISCHARGED
99	919227	R	R	R	R	R	R	R	R	R	R	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	EXPIRED
100	395091	R	S	R	R	S	S	R	S	R	R	S	-	S	S	S	R	S	R	-	R	S	S	S	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DAMA
101	920523	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	R	-	R	R	R	R	R	S	-	-	-	-	-	-	-	-	-	-	-	EXPIRED
102	920820	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DAMA
103	920944	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DISCHARGED
104	894755	S	S	R	R	R	S	S	S	S	S	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	S	S	S	S	S	EXPIRED
105	895036	-	-	-	-	-	-	-	-	-	-	-	R	R	R	-	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	EXPIRED
106	601246	-	-	-	-	-	-	-	-	-	-	-	R	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	R	R	R	R	R	R	R	R	R	R	R	S	-	-	-	-	-	-	-	DISCHARGED
107	917500	S	R	S	S	S	S	S	S	S	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	EXPIRED
108	921138	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	S	S	S	S	S	EXPIRED
109	177385	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	R	R	R	R	S	S	S	S	-	R	R	R	-	-	-	-	-	-	-	EXPIRED
110	885024	R	R	R	R	MS	S	R	R	S	S	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	EXPIRED
111	891945	-	-	-	-	-	-	-	-	-	-	-	R	R	R	-	R	R	R	R	R	R	R	R	R	R	R	R	-	-	-	-	-	-	-	R	-	-	-	S	-	-	-	-	S	R	-	-	-	-	-	-	DISCHARGED
112	921261	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	S	S	S	S	-	-	R	-	S	S	S	S	-	-	-	-	-	-	-	DISCHARGED
113	430749	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	EXPIRED
114	916550	R	R	R	R	R	R	R	R	R	R	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	EXPIRED
115	921738	R	S	R	R	MS	S	S	S	S	S	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DAMA
116	921777	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	R	S	R	R	R	R	S	S	-	S	S	S	MS	S	-	-	-	-	-	DISCHARGED
117	922476	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	S	S	S	S	MS	S	S	S	-	S	S	S	S	-	-	-	-	-	-	DISCHARGED
118	907582	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	EXPIRED
119	922517	R	S	S	S	S	S	S	S	S	S	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DAMA
120	922653	R	R	R	R	S	S	S	S	S	S	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DISCHARGED
121	911711	R	R	R	R	R	R	S	R	R	R	S	S	S	S	-	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DISCHARGED
122	922611	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	R	S	R	R	MS	S	S	S	S	S	S	S	R	R	-	-	-	-	-	DAMA
123	923355	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	R	R	R	R	R	R	R	R	R	R	R	S	-	-	-	-	-	-	-	DISCHARGED
124	923527	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DISCHARGED
125	774837	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DISCHARGED
126	922784	-	-	-	-	-	-	-	-	-	-	-	-	S	S	-	R	-	-	-	R	R	R	R	R	-	-	R	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DAMA
127	686357	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DISCHARGED
128	916012	R	R	R	R	S	S	R	S	S	S	S	R	S	S	-	R	R	R	R	R	R	S	S	S	R	R	R	R	R	R	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DISCHARGED
129	924180	-	-	-	-	-	-	-	-	-	-	-	R	S	R	-	R	R	R	R	R	R	R	R	R	R	R	R	R	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	S	S	S	S	S	DISCHARGED
130	922020	-	-	-	-	-	-	-	-	-	-	-	R	R	R	-	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DISCHARGED
131	867137	-	-	-	-	-	-	-	-	-	-	-	-	S	S	S	S	-	-	S	-	S	S	-	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DAMA
132	923505	R	R	R	R	R	R	R	R	R	R	R	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DAMA
133	200340	R	R	R	R	R	S	S	MS	R	R	R	R	S	R	-	R	R	R	R	R	R	S	MS	S	R	R	R	R	R	R	R	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DISCHARGED
134	925900	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DAMA
135	925897	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DAMA
136	805324	R	R	R	R	R	R	R	R	R	S	R	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DAMA
137	59242	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	S	R	S	R	S	R	R	S	-	S	S	S	R	-	-	-	-	-	-	DISCHARGED
138	926205	R	S	R	R	S	S	S	S	S	S	S	R	S	S	-	R	S	R	-	R	S	S	S	S	R	R	R	R	R	R	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DAMA
139	389110	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DAMA
140	926551	-	-	-	-	-	-	-	-	-	-	-	R	S	R	-	R	S	R	R	R	S	R	MS	R	R	R	R	R	R	R	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DAMA
141	817714	R	R	R	R	R	R	S	R	R	S	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DISCHARGED
142	927202	-	-	-	-	-	-	-	-	-	-	-	R	MS	S	-	R	R	R	R	R	R	R	R	R	MS	R	R	R	R	R	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DAMA
143	927724	-	-	-	-	-	-	-	-	-	-	-	R	S	S	-	R	S	S	R	MS	S	S	R	S	R	R	R	R	R	R	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DISCHARGED
144	928208	R	S	S	S	R	S	R	R	R	S	R	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DISCHARGED
145	927727	-	-	-	-	-	-	-	-	-	-	-	S	S	S	-	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DISCHARGED
146	928552	R	R	R	R	R	R	R	R	R	S	R	R	R	R	-	R	R	R	R	R	R	MS	S	R	R	R	R	R	R	MS	-	-	S	R	R	R	R	R	R	R	-	S	S	S	-	-	-	-	-	-	-	DAMA
147	875629	R	R	R	R	R	R	R	R	R	R	MS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DISCHARGED
148	929298	-	-	-	-	-	-	-	-	-	-	-	R	S	S	R	R	R	R	R	R	R	MS	R	R	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DISCHARGED
149	905101	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DAMA
150	930461	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DISCHARGED
151	930912	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	R	R	R	R	R	R	R	R	MS	S	S	R	R	-	-	-	-	-	-	DISCHARGED
152	931262	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DISCHARGED
153	893504	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DAMA
154	931556	-	-	-	-	-	-	-	-	-	-	-	R	R	R	-	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DISCHARGED
155	932247	-	-	-	-	-	-	-	-	-	-	-	R	S	R	-	R	S	R	R	R	R	S	R	R	R	R	R	R	R	R	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DAMA
156	932221	R	R	R	R	S	R	S	R	R	S	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DAMA
157	932286	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	R	S	R	R	S	S	-	S	-	S	S	S	-	-	-	-	-	-	-	DAMA
158	527028	R	R	R	R	R	R	S	R	R	R	R	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DISCHARGED

S.no	MRD NO	NAME	AGE	SEX	DATE OF ADMISSION TO ICU	COMORBIDITIES	RISK FACTORS	DIAGNOSIS	APACHE	DEVICE DAYS-MECHANICAL VENTILATION	DEVICE DAYS-CENTRAL LINE	DEVICE DAYS-URINARY CATHETER	DIRECT EXAMINATION GRAM STAIN	WET MOUNT-INDIA INK/CRYPTOCOCCAL ANTIGEN/BACTERIAL ANTIGEN	KOH MOUNT	ZN STAINING	AFB CULTURE
159	781548	BS	75	M	08-06-2020	HTN	OBESITY	CKD	12	-	4	4	-	-	ET-BYLC WITH PH	-	-
160	933101	BK	46	F	09-06-2020	NO	MALNUTRITION	CLD	14	-	4	12	ASCITIC FL-NO M/O SEEN	-	-	-	-
161	933092	VK	16	M	10-06-2020	NO	MALNUTRITION	SNAKE BITE	15	2	9	8	-	-	-	-	-
162	933426	GS	75	M	10-06-2020	NO	ELDERLY	CLD	16	2	7	-	-	-	-	-	-
163	932579	SK	67	F	10-06-2020	NO	ELDERLY	ALTERED SENSORIUM,BACKACHE	15	1	-	2	-	-	-	-	-
164	933419	JS	55	M	10-06-2020	DM	SEPSIS	SDH,SHOCK	12	1	2	3	-	-	-	-	-
165	908932	AK	82	F	11-06-2020	DM,HTN	ELDERLY	CLD	16	2	-	6	-	-	-	-	-
166	934079	JM	18	M	12-06-2020	NO	MALNUTRITION	SEIZURES	15	2	-	7	-	-	-	-	-
167	903486	GS	80	M	13-06-2020	DM	SEPSIS	AKI	16	-	-	-	-	-	-	-	-
168	934046	PS	40	F	14-06-2020	DM	SEPSIS	DKA	15	-	-	-	-	-	-	-	-
169	934036	JS	88	M	14-06-2020	PULMONARY	OBESITY	PLEURAL EFFUSION WITH SEPSIS	13	-	-	-	PL FL-NO M/O SEEN, CSF-NO M/O SEEN	INDIA INK-NEG, BACTERIAL ANTIGEN-NEG	-	PL FL-NEG	-
170	934644	SR	62	F	15-06-2020	NO	ELDERLY	CLD	13	-	-	-	-	-	-	-	-
171	725970	MR	73	M	15-06-2020	DM	IMMOBILISATION	CKD	16	-	-	-	ASCITIC FL-NO M/O SEEN	-	-	-	-
172	931388	KK	56	F	18-06-2020	DM	SEPSIS	CKD	14	4	-	-	-	-	-	-	-
173	935591	RK	43	M	18-06-2020	DM	SEPSIS	AKI RETROPERITONEAL MASS	12	1	-	-	ET-GNB	-	ET-BYLC WITH PH	-	-
174	934418	HS	25	M	19-06-2020	NO	MALNUTRITION	ALD,LGBS	14	5	-	-	-	-	-	-	-
175	936356	NR	41	F	21-06-2020	DM	IMMUNOCOMPROMISED	POST LSCS,SEPSIS	15	-	-	4	-	-	-	-	-
176	937081	GK	56	F	24-06-2020	DM	SEPSIS	CKD	14	-	5	6	ET-NO M/O SEEN, PLEURAL FL-NO M/O SEEN	-	-	ET-NEG	-
177	678831	AS	70	M	25-06-2020	DM	SEPSIS	CKD	12	-	-	-	-	-	-	-	-
178	937657	B	38	F	26-06-2020	NO	IMMUNOCOMPROMISED	LSCS	13	-	-	11	-	-	-	-	-
179	937973	S	23	M	28-06-2020	NO	MALNUTRITION	SNAKE BITE	13	-	-	7	ET-GNCB	-	ET-NFES	ET-NEG	-
180	938322	LS	35	M	28-06-2020	PULMONARY	SMOKING	ASTHMA	12	-	-	-	-	-	-	-	-
181	938757	MS	18	M	30-06-2020	NO	MALNUTRITION	OPC POISONING	10	-	-	-	-	-	ET-NFES	-	-
182	101322	SO	76	M	30-06-2020	CARDIOVASCULAR	OBESITY	OLD CVA	15	-	-	-	-	-	-	-	-
183	938399	GS	66	M	30-06-2020	HTN	OBESITY	CVA	14	-	-	-	-	-	-	-	-
184	351356	SD	67	M	30-06-2020	DM	SEPSIS	CKD	15	-	-	-	-	-	ET-NFES	ET-NEG	-
185	938775	K	45	F	01-07-2020	DM	SEPSIS	ACID INGESTION	21	2	3	2	-	-	-	-	-
186	936763	MR	52	M	02-07-2020	NO	IMMUNOCOMPROMISED	VALGIRIA	15	-	-	3	-	-	-	-	-
187	815207	SG	74	M	03-07-2020	HTN	OBESITY	CARCINOMA LUNG	15	-	-	6	-	-	-	-	-
188	939961	PD	80	F	04-07-2020	PULMONARY	ELDERLY	COPD	15	6	-	14	BYLC WITH PH	-	ET-BYLC WITH PH	ET-NEG	-
189	940503	BS	45	M	06-07-2021	HTN	OBESITY	CVA	14	-	-	8	-	-	-	-	-
190	942200	PL	45	M	11-07-2020	NO	IMMUNOCOMPROMISED	SNAKE BITE	12	-	-	3	ET-GNB	-	ET-NFES	ET-NEG	-
191	905063	GK	77	F	15-07-2020	NO	ELDERLY	CLD	23	-	11	11	-	-	-	-	-
192	709186	DJ	80	M	15-07-2020	HTN	IMMUNOCOMPROMISED	LUNG CARCINOMA	12	-	8	8	BAL-GNB	-	-	BAL-NEG	-
193	931247	SK	65	F	17-07-2020	CHRONIC KIDNEY DISEASE	SEPSIS	CKD	15	-	-	-	-	-	-	-	-
194	944591	RD	70	M	19-07-2020	NO	ELDERLY	HEMATURIA	14	-	8	12	GNCB	-	SP-NFES	SP-NEG	-
195	944258	MS	75	M	19-07-2020	CHRONIC KIDNEY DISEASE	OBESITY	CKD	13	15	-	4	CSF-NO M/O SEEN	NEG	-	-	-
196	945839	SC	65	M	23-07-2020	PULMONARY	ELDERLY	COPD	13	18	-	-	SP-GNCB	-	SP-NFES	-	-
197	946121	BS	56	M	24-07-2020	DM,HTN	OBESITY	ALTERED SENSORIUM	14	-	-	11	ET-GNB	-	-	ET-NEG	-
198	946467	GS	52	M	25-07-2020	CHRONIC KIDNEY DISEASE	SEPSIS	CKD	14	-	-	22	-	-	-	-	-
199	947989	RR	78	F	29-07-2020	DM	SEPSIS	CKD	12	-	-	-	ET-BYLC WITH PH	-	ET-BYLC WITH PH	-	-
200	936310	SK	61	M	30-07-2020	CHRONIC KIDNEY DISEASE	SEPSIS	RSA,UTI,SEPSIS	13	-	-	12	-	-	-	-	-
201	36654	VM	61	M	31-07-2020	NO	ELDERLY	CLD	11	-	-	-	-	-	SP-NFES	SP-NEG	-
202	949493	KD	62	F	01-08-2020	NO	ELDERLY	UTI	20	2	-	4	SP-GPC,GNB,GNCB,BYLC, CSF-NO M/O SEEN	-	SP-BYLC	SP-NEG, CSF-NEG	-
203	947989	RR	78	F	04-08-2020	DM	SEPSIS	CKD	16	5	-	3	ET-GNB,BYLC WITH PH	-	ET-BYLC WITH PH	ET-NEG	-
204	950085	D	36	F	05-08-2020	PULMONARY	SEPSIS	LRTI	12	-	-	13	PL FL-GNCB, SP-GPC,GNB,GNCB	-	SP-NFES	PL FL-NEG, SP-NEG	-
205	950886	KS	76	M	05-08-2020	CHRONIC KIDNEY DISEASE	OBESITY	CKD	23	7	-	6	ET-GNB,BYLC WITH PH	-	ET-BYLC WITH PH	ET-NEG	-
206	965044	SK	72	F	06-08-2020	NO	SEPSIS	ALTERED SENSORIUM	24	7	4	5	ET-GNB	-	ET-NFES	ET-NEG	-
207	911747	KS	50	F	10-08-2020	DM	SEPSIS	CKD	11	-	-	12	CSF-NO M/O SEEN	-	-	CSF-NEG	-
208	849750	A	60	F	12-08-2020	DM	IMMOBILISATION	CKD	12	6	-	5	-	-	-	-	-
209	954629	M	28	F	15-08-2020	CHRONIC KIDNEY DISEASE	IMMUNOCOMPROMISED	TCP,AKI	13	-	-	13	ET-GNB	-	ET-NFES	ET-NEG	-
210	931249	SK	65	F	16-08-2020	HTN	OBESITY	CKD	12	-	-	11	-	-	-	-	-
211	913007	NR	44	F	16-08-2020	CHRONIC KIDNEY DISEASE	OBESITY	CKD	15	5	-	9	-	-	-	-	-
212	956006	RK	40	M	18-08-2020	DM	SEPSIS	ALTERED SENSORIUM	14	-	-	12	-	-	ASCITIC FL-NFES	-	-
213	531212	SS	36	M	20-08-2020	NO	MALNUTRITION	DRUG OVERDOSE	12	9	-	2	ASCITIC FLUID-GNB	-	ASCITIC FL-NFES	-	-
214	957243	PK	45	F	22-08-2020	DM	IMMOBILISATION	CKD	13	-	3	11	ET-GNCB	-	ET-NFES	-	-
215	957242	JK	45	F	22-08-2020	NO	MALNUTRITION	UNKNOWN POISONONG	17	6	1	15	-	-	ET-NFES	-	-
216	68410	AB	74	M	22-08-2020	DM	SEPSIS	CKD	15	-	-	16	ET-NO M/O SEEN	-	ET-NFES	ET-NEG	-
217	195950	AK	48	F	25-08-2020	HTN	OBESITY	UGI BLEED	14	-	-	10	SP-GNB	-	SP-BYLC WITH PH	SP-NEG	-
218	911747	KS	50	F	25-08-2020	DM	SEPSIS	DM	15	-	-	10	CSF-NO M/O SEEN	NEG	-	CSF-NEG	-
219	171964	DD	65	F	26-08-2020	CHRONIC KIDNEY DISEASE	SEPSIS	CKD,AFI WITH TCP	13	8	-	6	ET-GNB	-	ET-NFES	ET-NEG	-
220	960654	S	60	M	31-08-2020	NO	ELDERLY	RSA	16	6	4	-	ASCITIC FLUID-NO M/O SEEN	-	-	-	-
221	959014	PS	52	M	31-08-2020	NO	IMMUNOCOMPROMISED	ACUTE PANCREATITIS	22	-	7	2	-	-	-	-	-
222	937341	K	63	M	02-09-2020	PULMONARY	IMMUNOCOMPROMISED	LUNG CANCER	21	-	-	3	ET-NO M/O SEEN,PLEURAL FL-GNCB	-	-	ET-NEG	-
223	906868	VS	42	M	03-09-2020	DM	SEPSIS	CKD	12	2	-	9	-	-	-	-	-
224	962154	NS	33	M	04-09-2020	NO	MALNUTRITION	OPC POISONING	13	-	-	-	ET-GNB,BYLC WITH PH	-	ET-BYLC WITH PH	ET-NEG	-
225	6353	KK	70	F	07-09-2020	NO	ELDERLY	SOL,SEPSIS	15	-	-	-	ET-GNB,GNCB	-	ET-NFES	ET-NEG	-
226	963881	GS	55	M	10-09-2020	NO	IMMUNOCOMPROMISED	CLD	14	1	4	4	-	-	-	-	-
227	962613	MS	65	F	16-09-2020	-	INFECTION	AFI	12	-	-	-	-	-	-	-	-
228	20059	GL	69	M	22-09-2020	DM	SEPSIS	DM FOOT	15	-	-	-	TISSUE-GNB	-	-	-	-
229	968094	NK	54	F	22-09-2020	NO	SMOKING	ASTHMA	12	-	-	1	ET-GNB	-	ET-BYLC WITH PH	-	-
230	960172	SK	75	F	23-09-2020	HTN	OBESITY	CAD	15	-	-	-	-	-	-	-	-
231	962607	ML	73	F	23-09-2020	CARDIOVASCULAR	IMMUNOCOMPROMISED	POST COVID	16	7	-	12	ET-GNB	-	ET-NFES	-	-
232	969807	TR	75	M	27-09-2020	DM	DM	CKD	14	-	4	3	-	-	-	ET-+ VE	-
233	968666	SS	85	M	27-09-2020	DM	SEPSIS	CKD	13	8	-	6	-	-	-	-	-
234	969912	KG	69	M	29-09-2020	PULMONARY	ELDERLY	COPD	21	7	5	3	-	-	-	-	-
235	967502	DD	62	F	01-10-2020	HTN	ELDERLY	POST COVID	20	5	-	4	SP-GNB	-	SP-NFES	SP-NEG	-
236	971448	PK	81	M	02-10-2020	DM	ELDERLY	POST COVID ILLNESS	15	-	-	7	ET-GPC	-	-	ET-NEG	-

S.no	MRD NO	FUNGAL CULTURE	CULTURE URINE	BODY FLUID	BLOOD	ET/SPUTUM/BAL	SOFT TISSUE INFECTION	HOSPITAL /COMMUNITY ACQUIRED INFECTION	VAP/CLABSI/CAUTI
159	781548	-	-	-	NG	E COLI	-	COMMUNITY	-
160	933101	-	NG	ASCITIC FL-NG	STENOTROPHOMONAS MALTOPHILA	-	-	HOSPITAL	-
161	933092	-	NG	-	NG	-	TISSUE-STAPH AUREUS,PUS-STAPH AUREUS	COMMUNITY	-
162	933426	-	KLEBSIELLA PNEUMONIAE	-	NG	-	-	COMMUNITY	-
163	932579	-	KLEBSIELLA PNEUMONIAE	-	KLEBSIELLA PNEUMONIAE	-	-	COMMUNITY	-
164	933419	-	NG	-	NG	-	TISSUE-NG, WOUND SWAB-KLEBSIELLA PNEUMONIAE	HOSPITAL	-
165	908932	-	E COLI	-	-	-	-	COMMUNITY	-
166	934079	-	E COLI	-	-	-	-	COMMUNITY	-
167	903486	-	E COLI	-	NG	-	-	COMMUNITY	-
168	934046	-	NG	-	ENTEROCOCCUS GALLINARUM	E COLI	-	COMMUNITY	-
169	934036	-	CANDIDA TROPICALIS	CSF-NG	NG	-	WOUND SWAB- E COLI	COMMUNITY	-
170	934644	-	NG	-	E COLI	-	-	COMMUNITY	-
171	725970	-	ACINETOBACTER BAUMANNII	NG	STAPHYLOCOCCUS EPIDERMIDIS	-	-	HOSPITAL	-
172	931388	-	NSG	-	STAPHYLOCOCCUS AUREUS	-	PUS-NG	HOSPITAL	-
173	935591	-	-	-	-	ET-KLEB KNEUMONIAE	-	COMMUNITY	-
174	934418	-	-	ASCITIC FL-ACINETOBACTER BAUMANNII	-	-	-	HOSPITAL	-
175	936356	-	PROVIDENTIA RETTGERI	-	STAPHYLOCOCCUS EPIDERMIDIS	-	WOUND SWAB-KLEB PNEUMONIAE	COMMUNITY	-
176	937081	-	E COLI	PLEURAL FL-NG	E COLI	ET-NG	-	COMMUNITY	-
177	678831	-	E COLI	-	E COLI	-	-	COMMUNITY	-
178	937657	-	-	-	NG	-	PUS-STAPH AUREUS	COMMUNITY	-
179	937973	-	NG	-	NG	ET-ACINETOBACTER BAUMANNII	-	HOSPITAL	-
180	938322	-	NG	-	ENTEROCOCCUS FAECALIS	-	-	COMMUNITY	-
181	938757	-	-	-	NG	ET-ENTEROBACTER CLOACAE	-	COMMUNITY	-
182	101322	-	E COLI	-	NG	-	-	COMMUNITY	-
183	938399	-	NG	-	E COLI	-	-	HOSPITAL	-
184	351356	-	-	-	-	ET-SPHINGOMONAS PAUCIMOBILIS	-	HOSPITAL	-
185	938775	-	ENTEROCOCCUS FAECIUM	-	NG	-	-	COMMUNITY	-
186	936763	-	-	-	ACINETOBACTER BAUMANNII	-	-	HOSPITAL	-
187	815207	-	KLEBSIELLA PNEUMONIAE	-	E COLI	-	-	COMMUNITY	-
188	939961	ET-NG	NG	-	NG	ET-PSEUDOMONAS AERUGINOSA	-	HOSPITAL	-
189	940503	-	E COLI	-	NG	-	-	COMMUNITY	-
190	942200	-	KLEBSIELLA PNEUMONIAE	-	NG	ET-PSEUDOMONAS AERUGINOSA	-	HOSPITAL	-
191	905063	-	KLEBSIELLA PNEUMONIAE	-	NG	-	-	COMMUNITY	-
192	709186	-	NG	-	NG	BAL-KLEBSIELLA PNEUMONIAE	-	COMMUNITY	-
193	931247	-	-	-	-	-	PUS-PSEUDOMONAS AERUGINOSA	HOSPITAL	-
194	944591	-	NG	-	-	SP-ACINETOBACTER BAUMANNII	-	COMMUNITY	-
195	944258	-	MYROIDES SP	CSF-NG	NG	-	-	HOSPITAL	-
196	945839	-	E COLI	-	NG	SP-ACINETOBACTER BAUMANNII	-	COMMUNITY	-
197	946121	ET-CANDIDA TROPICALIS	CANDIDA TROPICALIS	-	STAPHYLOCOCCUS EPIDERMIDIS	-	WOUND SWAB-ENTEROBACTER CLOACAE	COMMUNITY	-
198	946467	-	ENTEROCOCCUS FAECIUM	-	NG	-	-	COMMUNITY	-
199	947989	-	-	-	BURKHOLDERIA CEPACIA	-	-	HOSPITAL	-
200	936310	-	E COLI	-	STAPHYLOCOCCUS HOMINIS	-	-	HOSPITAL	-
201	36654	-	CANDIDA ALBICANS	-	NG	SP-KLEBSIELLA PNEUMONIAE	-	COMMUNITY	-
202	949493	-	KLEB PNEUMONIAE	STAPH HEMOLYTICUS	-	SP-KLEBSIELLA PNEUMONIAE	-	COMMUNITY	-
203	947989	-	-	-	BURKHOLDERIA CEPACIA	ET-ACINETOBACTER BAUMANNII	-	HOSPITAL	-
204	950085	-	-	NG	NG	SP-PSEUDOMONAS AERUGINOSA	-	HOSPITAL	-
205	950886	-	KLEB PNEUMONIAE	-	NG	ET-NSG	-	COMMUNITY	-
206	965044	-	KLEB PNEUMONIAE	-	-	ET-KLEB PNEUMONIAE	-	COMMUNITY	-
207	911747	-	KLEB PNEUMONIAE	NG	-	-	-	COMMUNITY	-
208	849750	-	PSEUDOMONAS LUTEOLA	-	STAPHYLOCOCCUS HOMINIS	-	-	HOSPITAL	-
209	954629	-	NG	-	NG	-	VAGINAL SWAB-KLEB PNEUMONIAE	COMMUNITY	-
210	931249	-	-	-	PSEUDOMONAS AERUGINOSA	-	-	HOSPITAL	-
211	913007	-	-	-	STAPHYLOCOCCUS AUREUS	-	TISSUE-BURKOLDERIA CEPACIA	COMMUNITY	-
212	956006	-	ENTEROCOCCUS FAECIUM	ASCITIC FLUID-NG	NG	-	-	COMMUNITY	-
213	531212	-	-	ASCITIC FLUID-KLEBSIELLA PNEUMONIAE	STAPHYLOCOCCUS EPIDERMIDIS	-	-	COMMUNITY	-
214	957243	-	PSEUDOMONAS AERUGINOSA	-	STAPHYLOCOCCUS HOMINIS	ET-ACINETOBACTER BAUMANNII	-	HOSPITAL	-
215	957242	-	NG	-	NG	ET-E COLI	-	COMMUNITY	-
216	68410	-	CITROBACTER KOSERI	-	STAPHYLOCOCCUS HEMOLYTICUS	ET-NSG	WOUND SWAB-PSEUDOMONAS AERUGINOSA	HOSPITAL	-
217	195950	SP-NG	NSG	-	NG	SP-KLEBSIELLA PNEUMONIAE	PUS-ENTEROBACTER AEROGENES	COMMUNITY	-
218	911747	-	-	CSF-NG	-	-	TISSUE-PSEUDOMONAS AERUGINOSA	HOSPITAL	-
219	171964	-	-	-	-	ET-BURKHOLDERIA CEPACIA	-	HOSPITAL	-
220	960654	-	ENTEROCOCCUS FAECIUM	ASCITIC FLUID-NG	NG	-	-	COMMUNITY	-
221	959014	-	E COLI	-	NG	ET-NG	-	COMMUNITY	-
222	937341	NG	-	PLEURAL FL-PSEUDOMONAS AERUGINOSA	-	ET-NG	-	HOSPITAL	-
223	906868	-	NG	-	BURKHOLDERIA CEPACIA	-	PUS-PSEUDOMONAS STUTZERI	HOSPITAL	-
224	962154	-	-	-	NG	ET-PSEUDOMONAS AERUGINOSA	-	HOSPITAL	-
225	6353	-	CANDIDA TROPICALIS	-	STAPHYLOCOCCUS EPIDERMIDIS	ET-KLEB PNEUMONIAE,ACINETOBACTER BAUMANNII	-	COMMUNITY	-
226	963881	-	NG	-	ACINETOBACTER LWOFFII	-	-	HOSPITAL	-
227	962613	ET-ASPERGILLUS FLAVUS	-	NG	ET-NG	-	NO	-	-
228	20059	-	-	-	-	-	PUS-NG, TISSUE - E COLI	COMMUNITY	-
229	968094	-	NG	-	NG	ET-ACINETOBACTER HEMOLYTICUS	-	COMMUNITY	-
230	960172	-	E COLI	-	NG	-	TISSUE-NG	HOSPITAL	-
231	962607	-	NG	-	-	ET-KLEBSIELLA PNEUMONIAE	-	COMMUNITY	-
232	969807	-	-	NG	ET-NG	-	NO	-	-
233	968666	-	E COLI	-	NG	SP- KLEB PNEUMONIAE	-	COMMUNITY	-
234	969912	-	KLEB PNEUMONIAE	-	-	-	-	HOSPITAL	-
235	967502	-	-	-	-	SP-KLEB PNEUMONIAE	-	HOSPITAL	-
236	971448	NG	E COLI,CANDIDA CEFERRI	-	NG	-	-	COMMUNITY	-

												RESPIRATORY																				PUS																									
S.no	MRD NO	MDR	XDR	PDR	MRSA/VRE	ESBL(CONFIRMED)	ESBL(PROBABLE)	MBL (PROBABALE)	MBL (CONFIRMED)	Amp C (PROBABALE)	Amp C (CONFIRMED)	AMP	TIC	AMK	GEN	COT	CAZ	CPM	LEVO	MIN	CIP	TZP	CSL	AMC	IPM	ERT	MEM	DOR	CTR	TGC	PB	AMP	TIC	AMK	GEN	COT	CAZ	CPM	LEVO	MIN	CIP	TZP	CSL	AMC	IPM	ERT	MEM	CTR/CTX	PB	TG	AMP	TIC	AMK	GEN	COT	CEP	CXM
159	781548	MDR	XDR	-	-	-	ESBL	MBL	MBL	AMP C	-	-	-	S	-	R	R	R	R	R	R	R	S	R	S	S	S	R	R	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
160	933101	MDR	XDR	-	-	-	ESBL	MBL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
161	933092	MDR	-	-	MRSA	-	ESBL	MBL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
162	933426	MDR	XDR	-	-	ESBL	ESBL	MBL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	R	R	R	R	R	R	R
163	932579	NO	NO	-	-	ESBL	ESBL	MBL	-	AMP C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	S	S	S	S	S	S	S
164	933419	MDR	XDR	-	-	ESBL	ESBL	MBL	-	AMP C	FLATTENING OF ZONE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	R	R	S	S	S	R	R	R	R	R	R	R	R	S	R	R	R	-	S	-	-	-	-	-	-	-
165	908932	MDR	XDR	-	-	-	ESBL	MBL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	R	R	S	S	S	R	R
166	934079	MDR	-	-	-	-	ESBL	MBL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	MS	S	S	S	R	R	R
167	903486	MDR	XDR	-	-	-	ESBL	MBL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	R	R	R	R	R	R	R
168	934046	MDR	XDR	-	-	ESBL	ESBL	MBL	-	-	-	-	-	S	S	R	R	R	R	R	R	R	R	R	R	R	R	R	R	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
169	934036	MDR	XDR	-	-	-	ESBL	MBL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	-	S	-	-	-	-	-	-	-
170	934644	MDR	-	-	-	-	ESBL	MBL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
171	725970	MDR	XDR	-	-	ESBL	ESBL	MBL	-	AMP C	DISTORTION OF ZONE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	R	R	R	R	R	R	R
172	931388	NO	NO	-	-	-	ESBL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
173	935591	MDR	XDR	-	-	-	ESBL	-	MBL	-	-	R	R	R	S	S	R	R	R	R	R	R	R	R	MS	R	R	R	R	R	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
174	934418	MDR	XDR	-	-	-	ESBL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
175	936356	MDR	XDR	-	-	-	ESBL	MBL	-	AMP C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	S	S	R	R	R	R	R	R	R
176	937081	MDR	XDR	-	-	-	ESBL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	R	R	R	R	R	R	R
177	678831	MDR	-	-	-	-	ESBL	MBL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	R	S	S	S	R	R	S
178	937657	NO	NO	-	-	-	ESBL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
179	937973	MDR	XDR	-	-	ESBL	ESBL	MBL	-	AMP C	-	R	R	R	MS	R	R	R	R	R	R	R	R	R	R	R	R	R	R	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
180	938322	NO	NO	-	-	-	ESBL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
181	938757	MDR	XDR	-	-	-	ESBL	-	-	-	-	R	R	S	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
182	101322	MDR	XDR	-	-	-	ESBL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	R	R	S	S	R	R	R
183	938399	NO	NO	-	-	-	ESBL	MBL	-	AMP C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
184	351356	MDR	-	-	-	-	ESBL	-	-	-	-	-	-	R	R	R	-	R	-	-	-	R	R	-	R	R	R	-	-	S	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
185	938775	MDR	XDR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
186	936763	MDR	XDR	-	-	-	ESBL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
187	815207	NO	NO	-	-	-	ESBL	MBL	-	AMP C	FLATTENING OF ZONE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	S	-	S	-	-
188	939961	NO	NO	-	-	-	-	MBL	-	-	-	-	-	S	MS	-	-	S	-	-	S	-	S	-	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
189	940503	MDR	XDR	-	-	ESBL	ESBL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	R	R	R	R	R	R	R
190	942200	MDR	XDR	-	-	ESBL	ESBL	MBL	-	AMP C	-	R	R	R	R	R	R	R	R	R	R	MS	R	R	R	R	R	R	R	R	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	R	R	R	R	R	R	R
191	905063	MDR	XDR	-	-	ESBL	ESBL	-	-	AMP C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	S	R	R	R	R
192	709186	MDR	XDR	-	-	ESBL	ESBL	MBL	-	AMP C	-	R	R	S	S	R	R	R	R	R	R	MS	S	R	S	S	S	R	R	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
193	931247	MDR	XDR	-	-	-	ESBL	MBL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	-	-	-	-	-	-	-	-	-
194	944591	MDR	XDR	-	-	-	-	-	-	AMP C	-	R	R	R	R	S	R	R	R	R	R	R	R	R	R	R	R	R	R	MS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
195	944258	MDR	XDR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	R	R	R	R	R	R	R
196	945839	MDR	XDR	-	-	-	ESBL	MBL	-	-	-	R	R	R	S	R	R	R	R	R	R	R	R	R	R	R	R	R	R	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	S	S	S	S	S	S	S
197	946121	MDR	XDR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	-	-	-	-	-	-	-	-
198	946467	MDR	XDR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
199	947989	MDR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
200	936310	MDR	XDR	-	-	-	ESBL	-	-	AMP C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	R	R	S	S	R	R	R
201	36654	MDR	XDR	-	-	ESBL	ESBL	-	-	AMP C	-	R	R	S	S	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
202	949493	MDR	XDR	-	-	ESBL	ESBL	MBL	-	-	DISTORTION OF ZONE	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	R	R	R	R	R	R	R
203	947989	MDR	XDR	-	-	-	ESBL	-	-	-	FLATTENING OF ZONE	R	R	R	R	R	R	R	R	MS	R	R	R	R	R	R	R	R	R	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
204	950085	MDR	XDR	-	-	-	-	-	-	-	-	R	R	S	S	R	R	S	R	R	S	R	S	R	S	R	S	R	R	R	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
205	950886	MDR	XDR	-	-	-	ESBL	MBL	MBL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	R	R	S	S	R	R	R
206	965044	MDR	XDR	-	-	-	ESBL	-	MBL	AMP C	-	R	R	R	R	S	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	R	R	R	R	R	-	R
207	911747	MDR	-	-	-	ESBL	ESBL	MBL	MBL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	R	R	S	S	R	R	R
208	849750	MDR	XDR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	R	R	MS	R	R	R	R
209	954629	MDR	XDR	-	-	ESBL	ESBL	MBL	MBL	AMP C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	-	R	-	-	-	-	-	-	-
210	931249	MDR	XDR	-	-	-	ESBL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
211	913007	MDR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	R	S	R	S	R	S	S	S	MS	R	S	S	R	S	R	S	R	-	-	-	-	-	-	-	-	-
212	956006	MDR	XDR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
213	531212	MDR	XDR	-	-	-	ESBL	-	-	AMP C	DISTORTION OF ZONE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
214	957243	MDR	XDR	-	-	-	ESBL	MBL	-	-	-	R	R	R	R	R	R	R	R	R	R	R	MS	R	R	R	R	S	R	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	R	R	R	R	R	R	R
215	957242	MDR	XDR	-	-	ESBL	ESBL	MBL	-	-	-	R	R	R	R	R	R	R	R	R	R	R	R	R	S	S	S	R	R	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
216	68410	MDR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	R	R	S	S	R	S	S	R	R	MS	R	S	R	S	R	S	R	-	-	R	R	S	S	R	R	R
217	195950	MDR	XDR	-	-	ESBL	ESBL	-	-	-	-	R	R	R	R	R	R	R	R	R	R	R	R	R	MS	R	R	-	R	R	-	R	R	S	R	R	R	R	-	-	R	R	R	R	R	R	R	R	-	-	-	-	-	-	-	-	-
218	911747	MDR	-	-	-	-	-	MBL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	R	S	S	S	R	S	S	S	R	R	S	S	R	R	R	MS	R	-	-	-	-	-	-	-	-	-
219	171964	MDR	-	-	-	-	-	-	-	-	-	-	-	-	-	R	R	-	R	R	-	-	-	-	-	-	R	-	-	R	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
220	960654	MDR	XDR	-	-	-	ESBL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
221	959014	MDR	XDR	-	-	-	ESBL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	R	R	S	S	R	R	R
222	937341	NO	NO	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
223	906868	NO	NO	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	-	S	-	-	-	-	-	-	-
224	962154	MDR	-	-	-	-	ESBL	-	-	-	-	R	S	S	S	R	S	S	S	R	R	S	S	R	S	R	S	R	R	R	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
225	6353	MDR	XDR	-	-	ESBL	ESBL	MBL	-	-	-	R	R	R	R	R	R	R	R	R	R	R	S	R	R	R	R	R	R	R	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
226	963881	NO	NO	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
227	962613	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
228	20059	MDR	XDR	-	-	-	-	MBL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	R	R	S	S	S	R	R	R	R	R	R	R	R	R	R	R	R	-	R	-	-	-	-	-	-	-
229	968094	MDR	XDR	-	-	-	-	-	-	AMP C	DISTORTION OF ZONE	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
230	960172	MDR	XDR	-	-	ESBL	ESBL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	R	R	R	R	R	R	-
231	962607	MDR	XDR	-	-	ESBL	ESBL	-	-	AMP C	DISTORTION OF ZONE	R	R	S	R	R	R	S	R	R	R	R	MS	MS	R	R	R	R	R	R	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
232	969807	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
233	968666	MDR	XDR	-	-	ESBL	ESBL	MBL	-	AMP C	-	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	R	R	R	R	R	R	R
234	969912	MDR	XDR	-	-	-	-	-	-	AMP C	DISTORTION OF ZONE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	R	R	S	R	S	R	R
235	967502	MDR	XDR	-	-	ESBL	ESBL	-	-	AMP C	DISTORTION OF ZONE	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
236	971448	MDR	XDR	-	-	-	ESBL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	R	R	R	R	R	R	R

		ANTIMICROBIAL SENSITIVITY																																																			
		URINE											BLOOD/BODY FLUID																						GPC														ANTIFUNGAL SENSITIVITY					
S.no	MRD NO	CTR	CAZ	NX	OF	NIT	TZP	CSL	AMC	ERT	IPM	FOS	AMP	AMK	GEN	LEVO	CIP	COT	CXM	CAZ	CTR	CPM	CSL	AMC	TZP	IPM	MEM	ERT	DOR	-	MIN	TGC	COL	PEN	DPT	CIP	LEV	GEN/GHL	COT	TET	RIF	NIT	TEC	VAN	LZ	ERY	CLINDA	FLU	VORI	AMPHO	CASPO	MICA	OUTCOME
159	781548	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DISCHARGED
160	933101	-	-	-	-	-	-	-	-	-	-	-	R	R	R	-	R	S	R	R	R	R	R	R	R	R	R	R	R	R	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DISCHARGED
161	933092	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	R	S	R	R	S	S	S	S	-	S	S	S	R	-	-	-	-	-	-	DISCHARGED
162	933426	R	R	R	R	R	R	R	R	R	R	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DISCHARGED
163	932579	S	S	S	S	S	S	S	S	S	S	R	R	R	R	-	R	R	R	R	R	R	R	R	R	MS	R	R	R	R	R	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DISCHARGED
164	933419	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DAMA
165	908932	R	R	R	R	S	S	R	S	S	R	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DISCHARGED
166	934079	R	MS	MS	S	R	S	R	S	R	R	R	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DAMA
167	903486	R	R	R	R	R	R	R	R	R	R	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DAMA
168	934046	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	S	-	S	S	S	-	S	-	-	S	-	S	S	-	-	-	-	-	-	DAMA
169	934036	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	S	-	-	-	-	-	-	-	S	S	S	S	S	DISCHARGED
170	934644	-	-	-	-	-	-	-	-	-	-	-	R	S	S	-	R	S	S	S	S	S	S	R	S	S	S	S	S	S	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DISCHARGED
171	725970	R	R	R	R	R	R	S	R	R	S	R	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	EXPIRED
172	931388	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	R	-	R	-	S	S	S	S	-	S	S	S	S	-	-	-	-	-	-	DISCHARGED
173	935591	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DAMA
174	934418	-	-	-	-	-	-	-	-	-	-	-	R	R	R	-	R	S	R	R	R	R	MS	R	R	R	R	R	R	R	R	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DISCHARGED
175	936356	R	R	R	R	R	R	R	R	R	R	R	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DISCHARGED
176	937081	R	R	R	R	S	R	S	R	R	S	S	R	R	R	-	R	R	R	R	R	R	R	R	R	MS	R	R	R	R	R	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DISCHARGED
177	678831	R	R	R	R	S	S	S	S	S	S	S	R	S	S	-	R	R	R	R	R	R	S	S	S	S	S	S	R	R	R	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DISCHARGED
178	937657	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	R	-	R	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DISCHARGED
179	937973	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DISCHARGED
180	938322	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	S	S	S	S	S	-	S	-	-	S	S	S	MS	-	-	-	-	-	-	DISCHARGED
181	938757	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DISCHARGED
182	101322	R	R	R	R	R	R	R	R	S	R	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	EXPIRED
183	938399	-	-	-	-	-	-	-	-	-	-	-	S	S	S	S	R	R	S	S	S	S	S	S	S	S	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	EXPIRED
184	351356	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DAMA
185	938775	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	R	-	R	R	R	-	R	-	R	R	R	R	R	-	-	-	-	-	-	DAMA
186	936763	-	-	-	-	-	-	-	-	-	-	-	R	R	R	-	R	R	R	R	R	R	MS	R	R	R	R	R	R	R	R	MS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DAMA
187	815207	-	-	-	-	MS	-	-	-	-	-	S	S	S	S	-	R	S	S	S	S	S	S	S	S	S	S	S	S	S	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DISCHARGED
188	939961	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	EXPIRED
189	940503	R	R	R	R	MS	R	MS	R	R	S	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DISCHARGED
190	942200	R	R	R	R	R	R	S	R	R	S	MS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	EXPIRED
191	905063	R	R	R	R	R	R	R	R	R	R	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DAMA
192	709186	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DAMA
193	931247	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DAMA
194	944591	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DISCHARGED
195	944258	R	R	R	R	R	R	S	R	R	R	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DISCHARGED
196	945839	R	S	MS	R	S	S	S	S	S	S	S	R	S	S	-	R	S	R	R	R	R	S	R	S	S	S	R	R	R	S	R	R	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DAMA
197	946121	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DISCHARGED
198	946467	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	R	R	R	R	R	R	R	-	R	S	S	S	-	-	-	-	-	-	-	DISCHARGED
199	947989	-	-	-	-	-	-	-	-	-	-	-	-	-	R	-	R	S	-	S	-	-	-	-	-	-	S	-	-	-	MS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DAMA
200	936310	R	R	R	R	S	R	R	R	R	R	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DAMA
201	36654	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	S	R	S	S	R	DISCHARGED
202	949493	R	R	R	R	R	R	R	R	R	S	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	EXPIRED
203	947989	-	-	-	-	-	-	-	-	-	-	-	R	R	R	-	R	S	R	S	R	R	R	R	R	R	S	R	R	R	MS	R	R	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	EXPIRED
204	950085	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DISCHARGED
205	950886	R	R	R	R	R	R	S	R	R	S	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DAMA
206	965044	R	R	R	R	R	R	R	R	R	R	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DISCHARGED
207	911747	R	R	S	S	R	S	R	S	S	R	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DISCHARGED
208	849750	R	R	R	R	R	R	R	R	R	R	R	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DAMA
209	954629	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DISCHARGED
210	931249	-	-	-	-	-	-	-	-	-	-	-	R	R	R	-	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DAMA
211	913007	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	S	-	R	R	S	R	S	S	-	S	S	S	-	-	-	-	-	-	-	DAMA
212	956006	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	R	-	R	R	R	R	-	R	R	R	R	S	R	-	-	-	-	-	-	EXPIRED
213	531212	-	-	-	-	-	-	-	-	-	-	-	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	-	-	-	R	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DAMA
214	957243	R	R	R	R	R	R	S	R	R	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DAMA
215	957242	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DISCHARGED
216	68410	R	R	MS	R	R	R	S	R	R	S	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DAMA
217	195950	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DISCHARGED
218	911747	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	EXPIRED
219	171964	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	EXPIRED
220	960654	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	R	-	R	R	R	-	R	-	-	S	S	S	R	-	-	-	-	-	-	EXPIRED
221	959014	R	R	R	R	MS	R	R	R	R	R	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DAMA
222	937341	-	-	-	-	-	-	-	-	-	-	-	S	R	S	-	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DISCHARGED
223	906868	-	-	-	-	-	-	-	-	-	-	-	R	R	R	-	R	R	R	MS	R	R	R	R	R	R	MS	R	R	R	MS	R	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DAMA
224	962154	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DAMA
225	6353	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	S	S	S	S	S	DISCHARGED
226	963881	-	-	-	-	-	-	-	-	-	-	-	S	S	S	-	S	S	S	S	S	S	S	S	R	S	S	S	S	S	S	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DISCHARGED
227	962613	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	EXPIRED ON 22-9-20
228	20059	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DAMA
229	968094	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DISCHARGED
230	960172	R	R	R	R	R	R	R	R	R	R	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	EXPIRED
231	962607	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	EXPIRED
232	969807	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	EXPIRED ON 30-9-20
233	968666	-	R	R	R	R	R	R	R	R	R	R	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	EXPIRED
234	969912	R	R	R	R	R	R	R	R	R	R	R	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DISCHARGED
235	967502	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	EXPIRED
236	971448	R	R	R	R	R	R	R	R	R	R	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	S	S	R	S	S	DISCHARGED

S.no	MRD NO	NAME	AGE	SEX	DATE OF ADMISSION TO ICU	COMORBIDITIES	RISK FACTORS	DIAGNOSIS	APACHE	DEVICE DAYS-MECHANICAL VENTILATION	DEVICE DAYS-CENTRAL LINE	DEVICE DAYS-URINARY CATHETER	DIRECT EXAMINATION GRAM STAIN	WET MOUNT-INDIA INK/CRYPTOCOCCAL ANTIGEN/BACTERIAL ANTIGEN	KOH MOUNT	ZN STAINING	AFB CULTURE
237	971901	AS	32	M	03-10-2020	NO	IMMUNOCOMPROMISED	AFI WITH TCP	16	-	-	6	ET-GNB	-	ET-NFES	ET-NEG	-
238	970730	DS	35	M	04-10-2020	NO	MALNUTRITION	GI BLEED	16	6	-	5	-	-	-	-	-
239	791852	SK	31	M	07-10-2020	NO	MALNUTRITION	AFI WITH TCP	17	-	10	5	ET-GNCB	-	ET-NFES	ET-NEG	-
240	970625	KK	38	M	07-10-2020	NO	IMMUNOCOMPROMISED	AFI WITH TCP	15	-	6	6	ET-NO M/O SEEN	-	ET-NFES	ET-NEG	-
241	972608	VC	71	M	07-10-2020	HTN	OBESITY	CKD	15	-	-	6	-	-	-	-	-
242	970607	PC	46	M	08-10-2020	HTN	OBESITY	POST COVID ILLNESS	12	-	6	5	SP-GNB	-	SP-NFES	SP-NEG	-
243	969229	HS	63	M	10-10-2020	CHRONIC KIDNEY DISEASE	OBESITY	CKD	14	-	4	3	-	-	-	-	-
244	974129	ET	33	F	10-10-2020	NO	IMMUNOCOMPROMISED	POST LSCS	14	-	5	7	ET-GNCB	-	ET-NFES	ET-NEG	-
245	974181	KK	55	F	10-10-2020	CHRONIC KIDNEY DISEASE	SEPSIS	CKD	15	-	-	9	ET-GNB	-	ET-BYLC WITH PH	ET-NEG	-
246	972144	SR	63	M	12-10-2020	NO	ELDERLY	SDH	19	-	-	4	ET-GNB	-	ET-NFES	-	-
247	961020	AK	63	M	16-10-2020	HTN	IMMUNOCOMPROMISED	MALIGNANT MYELOMA	14	-	-	6	ET-NO M/O SEEN	-	-	-	-
248	972029	KD	73	F	17-10-2020	PULMONARY	ELDERLY	POST COVID BREATHLESSNESS	12	-	-	-	ET-GNB	-	ET-NFES	-	-
249	860865	JS	66	M	18-10-2020	DM,HTN	ELDERLY	CKD	12	-	-	6	ET-GNB	-	ET-BYLC WITH PH	-	-
250	977324	AD	41	F	19-10-2020	NO	IMMUNOCOMPROMISED	AFI WITH TCP	16	-	-	6	ET-GNB	-	ET-NFES	ET-NEG	-
251	978131	RR	80	F	21-10-2020	CHRONIC KIDNEY DISEASE	SEPSIS	CKD	15	-	-	13	GNB,GNCB	-	ET-NFES	NEG	-
252	978361	SK	66	F	22-10-2020	NO	ELDERLY	POST COVID ILLNESS	15	4	-	22	-	-	-	-	-
253	976124	AS	62	M	22-10-2020	NO	ELDERLY	POST COVID ILLNESS	20	-	-	14	ET-GNCB	-	ET-BYLC WITH PH	ET-NEG	-
254	418874	MJ	32	F	22-10-2020	NO	MALNUTRITION	AFI WITH TCP	10	-	12	9	ET-GNB	-	ET-NFES	ET-NEG	-
255	978909	KK	66	M	24-10-2020	-	-	AFI WITH TCP	12	19	-	4	-	-	SP-BYLC AND HYALINE SEPTATE FUNGAL HYPHAE	SP-NEG	-
256	979311	JS	73	M	25-10-2020	PULMONARY	ELDERLY	BREATHING DIFFICULTY	25	3	-	-	SP-GNB	-	SP-BYLC	-	-
257	977762	GS	19	M	25-10-2020	NO	MALNUTRITION	HANGING	11	11	7	-	ET-GNCB,GNB	-	ET-NFES	ET-NEG	-
258	979694	SR	41	F	26-10-2020	NO	REINTUBATION	AFI WITH TCP	20	3	9	-	ET-GNCB,GNB	-	ET-NFES	-	-
259	776523	SK	58	M	01-11-2020	NO	IMMUNOCOMPROMISED	LGI BLEED	17	3	-	3	ET-GPC,BYLC, SPUTUM-GPC,GNB,GNCB,BYLC	-	BYLC	-	-
260	980747	AK	32	M	02-11-2020	NO	IMMUNOCOMPROMISED	CLD	12	-	-	3	ET-BYLC, PLEURAL FL- GPC	-	BYLC	-	-
261	975534	TS	61	M	03-11-2020	CHRONIC KIDNEY DISEASE	ELDERLY	CKD	12	-	-	5	-	-	-	-	-
262	980211	HK	60	F	04-11-2020	NO	ELDERLY	POST COVID	23	-	-	7	-	-	-	-	-
263	982835	KR	80	M	06-11-2020	PULMONARY	IMMUNOCOMPROMISED	BREATHLESSNESS	24	-	-	-	-	-	-	-	-
264	985390	JP	17	F	09-11-2020	PULMONARY	MALNUTRITION	AFI WITH TCP	15	7	-	-	-	-	-	-	-
265	985274	AM	59	F	11-11-2020	CHRONIC KIDNEY DISEASE	IMMOBILISATION	CKD	11	18	-	-	-	-	-	-	-
266	985550	IP	70	F	11-11-2020	HTN	ELDERLY	DVT	10	9	9	3	ET-GNB, CSF-NO M/O SEEN	NEG	ET-NFES	-	-
267	985798	HR	65	M	11-11-2020	CARDIOVASCULAR	IMMUNOCOMPROMISED	MCA INFARCT	10	-	10	6	ET-GPB	-	-	-	-
268	53283	NA	67	F	13-11-2020	CHRONIC KIDNEY DISEASE	IMMOBILISATION	CKD	10	-	-	9	ET-BYLC	-	NFES	NEG	-
269	7088683	SK	63	F	16-11-2020	DM	SEPSIS	SOB	12	-	14	-	ET-GNCB CSF-GNCB	-	-	-	-
270	986940	RK	47	M	17-11-2020	NO	REINTUBATION	ALTERED SENSORIUM	13	25	6	7	-	-	-	-	-
271	982625	S	72	F	18-11-2020	NO	ELDERLY	POST COVID ILLNES	12	-	6	8	-	-	-	-	-
272	987770	SA	53	M	18-11-2020	NO	IMMUNOCOMPROMISED	CLD	13	-	-	11	SP-GPC,GNB,BYLC	-	SP-BYLC	-	-
273	128302	CP	57	F	21-11-2020	HTN	OBESITY	CAD	13	-	-	-	ET-GNCB	-	ET-NFES	ET-NEG	-
274	982547	PS	53	M	22-11-2020	-	TB	POST COVID ILLNESS	18	11	11	13	-	SP-BYLC	-	SPUTUM-SCANTY	-
275	990192	KK	68	F	23-11-2020	NO	ELDERLY	ALTERED SENSORIUM	12	4	-	14	SP-GPC,GPB,GNCB	-	-	-	-
276	991003	KK	55	M	24-11-2020	NO	IMMUNOCOMPROMISED	AFI	12	-	-	11	ET-GNCB	-	ET-NFES	-	-
277	990970	RS	55	M	25-11-2020	NO	MALNUTRITION	AFI WITH TCP	15	-	8	29	ET-GNB,GNCB	NEG	ET-BYLC	-	-
278	990991	HS	50	M	26-11-2020	NO	MALNUTRITION	PARAQUIT POISONING	13	9	-	4	ET-GNCB	-	ET-NFES	-	-
279	986222	HS	27	M	27-11-2020	NO	IMMUNOCOMPROMISED	OPC POISONING	15	-	-	17	-	-	-	-	-
280	992267	NS	52	M	28-11-2020	DM	SEPSIS	SEPSIS WITH SHOCK	12	6	-	8	-	-	-	-	-
281	990954	KK	22	F	29-11-2020	CHRONIC KIDNEY DISEASE	MALNUTRITION	CKD	13	-	-	-	-	-	-	-	-
282	987258	PA	60	F	29-11-2020	NO	ELDERLY	POST COVID ILLNESS	14	-	-	-	-	-	-	-	-
283	992317	GS	38	M	29-11-2020	NO	IMMUNOCOMPROMISED	POST COVID ILLNESS	15	-	-	-	-	-	-	-	-
284	993750	AS	44	M	02-12-2020	NO	MALNUTRITION	AFI	14	8	21	21	SP-GNB,GNCB CSF-NO M/O SEEN	-	ET-NFES, SP-NFES	NEG	-
285	984312	MK	55	F	03-12-2020	CHRONIC KIDNEY DISEASE	SEPSIS	RENAL CALCULI	15	15	1	3	-	-	ET-NFES	-	-
286	986522	RR	45	F	05-12-2020	NO	MALNUTRITION	AGE	15	2	-	15	-	-	-	-	-
287	996085	SG	20	M	13-12-2020	NO	MALNUTRITION	ARTHRITIS	15	-	5	9	-	-	-	-	-
288	430753	D	52	F	14-12-2020	CHRONIC KIDNEY DISEASE	SEPSIS	CKD	13	-	6	6	-	-	-	-	-
289	1000511	MB	63	F	15-12-2020	NO	IMMUNOCOMPROMISED	POST COVID	17	3	7	6	-	-	-	-	-
290	1001076	AR	70	M	18-12-2020	NO	IMMUNOCOMPROMISED	SEIZURE	15	7	-	3	-	-	-	-	-
291	982603	MS	52	M	18-12-2020	NO	ELDERLY	CA RECTUM	13	-	11	8	-	-	-	-	-
292	1001121	AK	59	F	18-12-2020	HTN	OBESITY	COPD	14	-	-	4	-	-	-	-	-
293	999327	GS	74	M	20-12-2020	NO	ELDERLY	AFI	15	-	-	8	ET-GNB	-	-	ET-NEG	-
294	996318	HS	68	M	21-12-2020	NO	ELDERLY	AFI	23	-	-	10	-	-	-	-	-
295	998542	GS	55	M	23-12-2020	NO	MALNUTRITION	RSA	15	-	-	16	ET-GNCB	-	-	-	-
296	1003800	LS	25	M	24-12-2020	CHRONIC KIDNEY DISEASE	IMMOBILISATION	CKD	16	4	10	-	-	-	ET-BYLC	-	-
297	1004553	PS	60	M	26-12-2020	CHRONIC KIDNEY DISEASE	ELDERLY	SEPSIS	13	-	8	-	-	-	-	-	-
298	1005243	SK	71	M	26-12-2020	NO	ELDERLY	HIP FRACTURE	13	-	8	13	-	-	-	-	-

S.no	MRD NO	FUNGAL CULTURE	CULTURE URINE	BODY FLUID	BLOOD	ET/SPUTUM/BAL	SOFT TISSUE INFECTION	HOSPITAL /COMMUNITY ACQUIRED INFECTION	VAP/CLABSI/CAUTI
237	971901	-	-	-	-	ET-KLEB PNEUMONIAE	-	COMMUNITY	-
238	970730	-	ENTEROCOCCUS FAECIUM	-	NG	-	-	COMMUNITY	-
239	791852	-	-	-	-	ET-KLEB PNEUMONIAE	-	COMMUNITY	-
240	970625	-	E COLI	-	NG	ET-NG	-	COMMUNITY	-
241	972608	-	KLEBSIELLA PNEUMONIAE	-	NG	-	-	COMMUNITY	-
242	970607	-	-	-	NG	SP-KLEBSIELLA PNEUMONIAE	-	COMMUNITY	-
243	969229	-	CANDIDA TROPICALIS	-	KLEBSIELLA PNEUMONIAE	-	-	COMMUNITY	-
244	974129	-	-	-	NG	ET-ACINETOBACTER BAUMANNII	-	HOSPITAL	-
245	974181	-	NSG	-	CANDIDA TROPICALIS	ET-KLEBSIELLA PNEUMONIAE	-	HOSPITAL	-
246	972144	-	NG	-	NG	ET-KLEBSIELLA PNEUMONIAE	-	COMMUNITY	-
247	961020	-	-	-	-	SP-PSEUDOMONAS AERUGINOSA, ET-NG	-	HOSPITAL	-
248	972029	-	NSG	-	KLEBSIELLA PNEUMONIAE	ET-KLEBSIELLA PNEUMONIAE	-	HOSPITAL	-
249	860865	-	-	-	NG	ET-E COLI	-	COMMUNITY	-
250	977324	-	CANDIDA ALBICANS	-	KLEBSIELLA PNEUMONIAE	ET-ENTEROBACTER CLOACAE	-	COMMUNITY	-
251	978131	-	E COLI	E COLI	NG	ET-KLEB PNEUMONIAE, ACINETOBACTER BAUMANNII	-	HOSPITAL	-
252	978361	-	E COLI	-	-	-	-	COMMUNITY	-
253	976124	-	NG	-	NG	ET-ACINETOBACTER BAUMANNII	-	COMMUNITY	-
254	418874	-	NG	-	NG	ET-KLEBSIELLA PNEUMONIAE	-	HOSPITAL	-
255	978909	SP-ASPERGILLLUS FLAVUS & CANDIDA SP	-	-	-	-	NO	-	-
256	979311	SP-NG	NG	-	NG	SP-KLEBSIELLA PNEUMONIAE	-	COMMUNITY	-
257	977762	-	-	-	-	ET-KLEBSIELLA PNEUMONIAE,ACINETOBACTER BAUMANNII	-	COMMUNITY	-
258	979694	-	NG	-	NG	ET-KLEBSIELLA PNEUMONIAE,ACINETOBACTER BAUMANNII	PUS-NG	HOSPITAL	PVAP
259	776523	-	Mixed growth	-	CANDIDA ALBICANS	ET-STAPH AUREUS	PUS-ACINETOBACTER BAUMANNII	HOSPITAL	-
260	980747	-	-	PLEURAL FL-STREPTOCOCCUS PNEUMONIAE	NG	NSG	-	HOSPITAL	-
261	975534	-	CANDIDA STELLATOIDES,CITROBACTER,PSEUDOMONAS SP.	-	NG	-	-	COMMUNITY	-
262	980211	-	CANDIDA PARAPSILOSIS	-	ACINETOBACTER BAUMANNII	ET-KLEBSIELLA OZANAE	-	HOSPITAL	-
263	982835	-	NG	-	NG	SP-ACINETOBACTER BAUMANNII	-	COMMUNITY	-
264	985390	-	NG	-	STAPHYLOCOCCUS AUREUS	-	-	HOSPITAL	-
265	985274	-	MYROIDES SP	-	-	-	-	HOSPITAL	-
266	985550	-	CANDIDA TROPICALIS	-	NG	ET-KLEBSIELLA PNEUMONIAE	-	COMMUNITY	-
267	985798	-	ENTEROFAECALIS	-	-	ET-KLEBSIELLA PNEUMONIAE	-	HOSPITAL	-
268	53283	-	PANTOEA SP.	-	NG	NG	-	COMMUNITY	-
269	7088683	-	TRICHOSPORON ASAHII	-	STAPHYLOCOCCUS HEMOLYTICUS	ET-ACINETOBACTER BAUMANNII	WOUND SWAB-ACINETOBACTER BAUMANNII	COMMUNITY	-
270	986940	-	NG	-	NG	ET-ACINETOBACTER BAUMANNII	-	COMMUNITY	-
271	982625	-	-	-	ACINETOBACTER BAUMANNII	-	-	COMMUNITY	-
272	987770	-	-	-	-	SP-KLEBSIELLA PNEUMONIAE	-	HOSPITAL	-
273	128302	-	NG	-	ACINETOBACTER BAUMANNII	ACINETOBACTER BAUMANNII	-	COMMUNITY	-
274	982547	SP-CANDIDA STELLATOIDES	-	NG	-	-	NO	-	-
275	990192	TRICHOSPORON,MUCOIDES	E COLI	-	-	-	PUS-E COLI	HOSPITAL	-
276	991003	-	-	-	-	ET-ENTEROBACTER AEROGENES	-	COMMUNITY	-
277	990970	-	NG	-	ACINETOBACTER BAUMANNII	ET-ACINETOBACTER BAUMANNII , ECOLI	-	COMMUNITY	-
278	990991	-	NG	-	NG	ET-KLEBSIELLA PNEUMONIAE,ACINETOBACTER BAUMANNII	-	HOSPITAL	-
279	986222	-	-	-	NG	KLEBSIELLA PNEUMONIAE	-	HOSPITAL	-
280	992267	-	KLEBSIELLA PNEUMONIAE	-	NG	-	-	COMMUNITY	-
281	990954	-	ENTEROCOCCUS FAECIUM	-	NG	-	-	COMMUNITY	-
282	987258	-	E COLI	-	NG	-	-	COMMUNITY	-
283	992317	-	-	-	STAPHYLOCCOCUS AUREUS	-	-	COMMUNITY	-
284	993750	-	NG	-	-	ET-NG, SP-PSEUDOMONAS AERUGINOSA	-	COMMUNITY	-
285	984312	-	-	-	-	ET-KLEBSIELLA PNEUMONIAE	-	HOSPITAL	-
286	986522	-	E COLI	-	NG	-	-	COMMUNITY	-
287	996085	-	NG	-	-	-	WOUND SWAB-STAPH AUREUS	COMMUNITY	-
288	430753	-	NG	-	NG	-	WOUND SWAB-ACINETOBACTER BAUMANNII	COMMUNITY	-
289	1000511	-	NSG	-	KLEBSIELLA PNEUMONIAE	-	-	HOSPITAL	-
290	1001076	-	NG	-	NG	ET-ACINETOBACTER BAUMANNII	-	COMMUNITY	-
291	982603	-	NG	-	NG	-	PUS-E COLI	HOSPITAL	-
292	1001121	ET-CANDIDA TROPICALIS	-	-	ENTEROCOCCUS FAECIUM	ET-NG	-	COMMUNITY	-
293	999327	ET-CANDIDA TROPICALIS	-	CSF-NG	STAPHYLOCOCCUS HAEMOLYTICUS	ET-KLEBSIELLA PNEUMONIAE	-	COMMUNITY	-
294	996318	ET-NG	E COLI	-	NG	-	-	COMMUNITY	-
295	998542	-	NG	-	NG	SP-ACINETOBACTER BAUMANNII	-	COMMUNITY	-
296	1003800	ET-ASPERGILLUS FLAVUS,CANDIDA SP	-	-	NG	ET-ACINETOBACTER BAUMANNII	-	HOSPITAL	-
297	1004553	-	NG	-	NG	-	WOUND SWAB-KLEBSIELLA PNEUMONIAE	COMMUNITY	-
298	1005243	-	NG	-	NG	KLEBSIELLA PNEUMONIAE	-	COMMUNITY	-

S.no	MRD NO	MDR	XDR	PDR	MRSA/VRE	ESBL(CONFIRMED)	ESBL(PROBABLE)	MBL (PROBABALE)	MBL (CONFIRMED)	Amp C (PROBABALE)	Amp C (CONFIRMED)
237	971901	MDR	XDR	-	-	ESBL	ESBL	MBL	-	-	-
238	970730	MDR	XDR	-	-	-	-	-	-	-	-
239	791852	MDR	XDR	-	-	ESBL	-	-	-	-	-
240	970625	MDR	XDR	-	-	-	ESBL	-	-	-	-
241	972608	MDR	XDR	-	-	ESBL	ESBL	MBL	-	AMP C	-
242	970607	MDR	-	-	-	-	-	-	-	AMP C	-
243	969229	MDR	-	-	-	ESBL	-	-	-	-	-
244	974129	MDR	XDR	-	-	ESBL	-	-	-	-	-
245	974181	MDR	XDR	-	-	ESBL	-	MBL	-	AMP C	DISTORTION OF ZONE
246	972144	NO	NO	-	-	ESBL	-	-	-	-	-
247	961020	NO	NO	-	-	-	-	-	-	-	-
248	972029	MDR	XDR	-	-	-	-	MBL	-	AMP C	FLATTENING OF ZONE
249	860865	MDR	XDR	-	-	ESBL	ESBL	-	-	-	-
250	977324	MDR	XDR	-	-	ESBL	ESBL	MBL	-	-	-
251	978131	MDR	XDR	-	-	ESBL	ESBL	-	-	-	-
252	978361	MDR	XDR	-	-	ESBL	ESBL	-	-	AMP C	-
253	976124	MDR	XDR	-	-	-	-	-	-	-	-
254	418874	MDR	XDR	-	-	ESBL	ESBL	-	MBL	-	-
255	978909	-	-	-	-	-	-	-	-	-	-
256	979311	MDR	XDR	-	-	ESBL	-	MBL	-	-	-
257	977762	NO	NO	-	-	-	-	-	-	-	-
258	979694	MDR	XDR	-	-	ESBL	-	-	MBL	AMP C	-
259	776523	MDR	-	-	-	ESBL	-	-	-	-	-
260	980747	MDR	XDR	-	-	-	-	-	-	-	-
261	975534	NO	NO	-	-	-	-	-	-	-	-
262	980211	MDR	XDR	-	-	-	-	MBL	-	AMP C	-
263	982835	MDR	XDR	-	-	-	-	-	-	AMP C	-
264	985390	MDR	XDR	-	MRSA	-	-	-	-	-	-
265	985274	MDR	XDR	-	-	-	-	-	-	-	-
266	985550	MDR	XDR	-	-	ESBL	-	MBL	-	-	-
267	985798	MDR	XDR	-	-	ESBL	-	-	-	AMP C	FLATTENING OF ZONE
268	53283	MDR	XDR	-	-	-	-	-	-	-	-
269	7088683	MDR	XDR	-	-	ESBL	-	-	-	AMP C	-
270	986940	MDR	XDR	-	-	-	-	-	-	AMP C	-
271	982625	MDR	XDR	-	-	-	-	-	-	AMP C	-
272	987770	MDR	-	-	-	-	-	MBL	-	-	-
273	128302	MDR	XDR	-	-	-	-	-	-	-	-
274	982547	-	-	-	-	-	-	-	-	-	-
275	990192	MDR	XDR	-	-	-	-	MBL	-	-	-
276	991003	NO	NO	-	-	-	-	MBL	-	-	-
277	990970	MDR	XDR	-	-	ESBL	ESBL	-	-	AMP C	FLATTENING OF ZONE
278	990991	MDR	XDR	-	-	ESBL	ESBL	-	-	-	-
279	986222	MDR	XDR	-	-	ESBL	ESBL	-	-	AMP C	-
280	992267	MDR	XDR	-	-	ESBL	ESBL	-	-	AMP C	-
281	990954	MDR	XDR	-	-	-	-	-	-	-	-
282	987258	MDR	XDR	-	-	-	ESBL	MBL	-	-	-
283	992317	MDR	-	-	MRSA	-	-	-	-	-	-
284	993750	MDR	XDR	-	-	-	-	MBL	-	-	-
285	984312	MDR	XDR	-	-	ESBL	ESBL	MBL	-	-	-
286	986522	MDR	XDR	-	-	ESBL	ESBL	-	-	AMP C	-
287	996085	MDR	-	-	-	-	-	-	-	-	-
288	430753	MDR	XDR	-	-	ESBL	ESBL	-	-	-	-
289	1000511	MDR	XDR	-	-	ESBL	ESBL	MBL	-	AMP C	FLATTENING OF ZONE
290	1001076	MDR	XDR	-	-	-	-	-	-	-	-
291	982603	NO	NO	-	-	-	ESBL	-	-	-	-
292	1001121	MDR	-	-	-	-	-	-	-	-	-
293	999327	MDR	XDR	-	-	ESBL	ESBL	-	-	AMP C	-
294	996318	MDR	XDR	-	-	-	ESBL	-	-	-	-
295	998542	MDR	XDR	-	-	ESBL	ESBL	-	-	AMP C	-
296	1003800	MDR	XDR	-	-	-	-	-	-	AMP C	FLATTENING OF ZONE
297	1004553	MDR	XDR	-	-	ESBL	ESBL	-	-	AMP C	DISTORTION OF ZONE
298	1005243	MDR	XDR	-	-	ESBL	ESBL	MBL	-	AMP C	FLATTENING OF ZONE

	RESPIRATORY																			
S.no	AMP	TIC	AMK	GEN	COT	CAZ	CPM	LEVO	MIN	CIP	TZP	CSL	AMC	IPM	ERT	MEM	DOR	CTR	TGC	PB
237	R	R	R	R	R	R	R	R	R	R	R	R	R	MS	R	R	R	R	R	-
238	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
239	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	S
240	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
241	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
242	-	-	S	R	R	-	S	-	-	R	S	S	MS	-	-	-	-	R	-	-
243	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
244	R	R	R	R	R	R	R	R	S	R	R	R	R	R	R	R	R	R	S	-
245	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	-
246	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
247	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	-
248	R	R	R	S	R	R	R	R	R	R	R	R	R	MS	R	R	R	R	R	-
249	R	R	S	S	R	R	R	R	R	R	R	R	R	R	R	S	R	R	S	-
250	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	S	-
251	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	-
252	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
253	R	MS	R	S	R	S	S	R	S	R	R	R	R	R	R	R	R	R	R	-
254	R	R	S	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	-
255	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
256	R	R	S	S	R	R	S	R	R	R	S	S	R	S	R	S	R	R	S	-
257	S	S	S	S	S	S	S	S	S	S	R	S	S	S	S	S	S	S	S	-
258	R	R	R	S	S	R	R	R	R	R	R	R	S	R	R	R	R	R	MS	-
259	-	-	-	S	S	-	-	S	S	S	-	-	-	-	-	-	-	S	-	-
260	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
261	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
262	R	R	R	R	R	R	R	R	R	R	-	R	R	R	R	R	R	R	R	S
263	R	R	R	S	R	R	R	R	MS	R	R	R	R	R	R	R	R	R	R	-
264	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
265	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
266	R	R	S	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	-
267	R	R	S	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	-
268	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
269	R	R	R	R	R	R	R	R	R	R	R	S	R	R	R	R	R	R	MS	-
270	R	R	R	R	R	R	R	R	MS	R	-	S	R	R	R	R	R	R	R	R
271	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
272	R	R	S	S	S	R	S	R	R	R	R	S	S	S	S	S	R	R	S	-
273	R	R	R	R	R	R	R	R	S	R	R	R	R	R	R	R	R	R	MS	-
274	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
275	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
276	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	-
277	-	-	R	S	R	-	S	-	-	R	R	S	S	S	S	R	-	S	S	-
278	R	R	S	S	S	R	R	R	R	R	R	R	R	R	R	R	R	R	-	-
279	R	R	S	S	S	R	R	R	R	R	R	R	R	R	R	R	R	R	S	-
280	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
281	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
282	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
283	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
284	R	R	-	R	R	-	R	R	-	R	R	R	R	R	R	R	R	R	R	-
285	R	R	R	R	S	R	R	R	S	R	R	R	R	R	R	R	R	R	S	-
286	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
287	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
288	R	R	R	R	R	R	R	R	S	R	R	R	R	R	R	R	R	R	S	R
289	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
290	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	MS	-
291	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
292	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
293	R	R	S	S	S	R	R	R	R	R	R	R	R	R	R	R	R	R	R	-
294	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
295	R	R	R	R	R	R	R	R	S	R	R	R	R	R	R	R	R	R	MS	-
296	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	MS	-
297	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
298	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	-

	PUS																									
S.no	AMP	TIC	AMK	GEN	COT	CAZ	CPM	LEVO	MIN	CIP	TZP	CSL	AMC	IPM	ERT	MEM	CTR/CTX	PB	TG	AMP	TIC	AMK	GEN	COT	CEP	CXM
237	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
238	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
239	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
240	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	R	R	R	R	R	R	R
241	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	R	R	R	R	S	R	R
242	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
243	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
244	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
245	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
246	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
247	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
248	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
249	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
250	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
251	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	R	R	S	S	R	S	R
252	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	R	R	S	R	S	R	R
253	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
254	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
255	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
256	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
257	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
258	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
259	R	R	R	S	S	S	S	S	S	S	R	R	R	R	R	R	R	-	R	-	-	-	-	-	-	-
260	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
261	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	S	-	-	-
262	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
263	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
264	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
265	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
266	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
267	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
268	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	R	R	R	R	R	R	R
269	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	S	MS	-	-	-	-	-	-	-
270	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
271	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
272	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
273	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
274	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
275	R	R	S	MS	R	R	R	R	R	R	R	R	R	R	R	R	R	-	R	R	R	S	S	S	R	R
276	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
277	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
278	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
279	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
280	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	R	R	R	R	R	R	R
281	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
282	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	S	R	R	R	R
283	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
284	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
285	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
286	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	R	R	S	R	R	R	R
287	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
288	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
289	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
290	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
291	S	S	S	S	R	S	S	S	S	R	S	S	S	S	S	S	R	-	-	-	-	-	-	-	-	-
292	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
293	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
294	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	R	R	S	R	R	R	R
295	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
296	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
297	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	-	R	-	-	-	-	-	-	-
298	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

S.no	MRD NO	ANTIMICROBIAL SENSITIVITY											BLOOD/BODY FLUID																									GPC																	ANTIFUNGAL SENSITIVITY					OUTCOME
		URINE																																																							
		CTR	CAZ	NX	OF	NIT	TZP	CSL	AMC	ERT	IPM	FOS	AMP	AMK	GEN	LEVO	CIP	COT	CXM	CAZ	CTR	CPM	CSL	AMC	TZP	IPM	MEM	ERT	DOR	-	MIN	TGC	COL	PEN	DPT	CIP	LEV	GEN/GHL	COT	TET	RIF	NIT	TEC	VAN	LZ	ERY	CLINDA	FLU	VORI	AMPHO	CASPO	MICA	
237	971901	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DAMA
238	970730	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	R	R	R	R	R	R	R	R	R	R	R	S	R	-	-	-	-	-	-	DISCHARGED
239	791852	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DISCHARGED
240	970625	R	R	R	R	S	R	S	R	R	S	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DISCHARGED
241	972608	R	R	R	R	R	R	R	R	R	R	R	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	EXPIRED
242	970607	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	EXPIRED
243	969229	-	-	-	-	-	-	-	-	-	-	-	-	S	S	-	R	S	R	-	R	S	S	R	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	R	R	S	S	S	DISCHARGED
244	974129	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DAMA
245	974181	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	S	S	S	S	S	DAMA
246	972144	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	EXPIRED
247	961020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	EXPIRED
248	972029	-	-	-	-	-	-	-	-	-	-	-	R	MS	R	S	R	R	R	R	R	R	R	R	R	MS	R	R	R	R	R	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DISCHARGED
249	860865	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	EXPIRED
250	977324	-	-	-	-	-	-	-	-	-	-	-	R	R	R	-	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	S	S	S	S	S	DISCHARGED
251	978131	R	R	R	R	S	S	R	MS	R	R	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DISCHARGED
252	978361	R	R	R	R	S	S	R	S	S	R	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DAMA
253	976124	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	EXPIRED
254	418874	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DISCHARGED
255	978909	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	SHIFT TO WARD ON 26/10/20
256	979311	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	EXPIRED
257	977762	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	EXPIRED
258	979694	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DAMA
259	776523	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	R	S	R	R	S	S	R	S	-	S	S	S	-	S	-	-	-	-	-	EXPIRED
260	980747	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	S	R	R	S	R	R	S	R	-	R	R	S	-	R	-	-	-	-	-	DISCHARGED
261	975534	-	S	-	-	-	S	S	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	EXPIRED
262	980211	-	-	-	-	-	-	-	-	-	-	-	R	-	R	-	-	R	R	R	R	R	R	R	-	R	R	R	R	R	-	S	R	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DISCHARGED
263	982835	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DISCHARGED
264	985390	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	R	S	R	R	S	R	R	S	R	S	S	S	-	-	-	-	-	-	-	DAMA
265	985274	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DISCHARGED
266	985550	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DISCHARGED
267	985798	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	S	S	R	R	R	R	R	R	-	S	S	S	MS	-	-	-	-	-	-	DISCHARGED
268	53283	MS	R	R	R	R	R	S	R	R	R	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DISCHARGED
269	7088683	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DAMA
270	986940	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DAMA
271	982625	-	-	-	-	-	-	-	-	-	-	-	R	R	R	-	R	R	R	-	R	R	R	R	R	R	R	R	R	S	MS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DAMA
272	987770	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DISCHARGED
273	128302	-	-	-	-	-	-	-	-	-	-	-	R	R	R	-	R	R	R	R	R	R	R	R	R	R	R	R	R	S	MS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	EXPIRED
274	982547	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	EXPIRED ON 26/11/20
275	990192	R	R	R	R	R	R	MS	R	S	R	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DISCHARGED
276	991003	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DAMA
277	990970	-	-	-	-	-	-	-	-	-	-	-	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	MS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DISCHARGED
278	990991	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DISCHARGED
279	986222	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DAMA
280	992267	R	R	R	R	R	R	R	R	R	R	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DISCHARGED
281	990954	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	R	R	R	R	R	R	R	R	R	S	S	S	R	-	-	-	-	-	-	DISCHARGED
282	987258	R	R	MS	R	R	R	R	R	S	R	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DISCHARGED
283	992317	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	R	S	R	R	S	S	S	S	-	S	S	S	R	-	-	-	-	-	-	DISCHARGED
284	993750	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DISCHARGED
285	984312	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	EXPIRED
286	986522	R	S	R	R	R	R	R	R	S	R	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DAMA
287	996085	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	R	S	R	R	S	S	S	S	R	S	S	S	R	-	-	-	-	-	-	DISCHARGED
288	430753	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DAMA
289	1000511	-	-	-	-	-	-	-	-	-	-	-	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DISCHARGED
290	1001076	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DAMA
291	982603	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DISCHARGED
292	1001121	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	R	-	R	R	-	-	R	-	-	S	S	R	-	-	-	-	-	-	-	DISCHARGED
293	999327	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DISCHARGED
294	996318	R	R	R	R	S	S	R	S	R	R	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DISCHARGED
295	998542	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DISCHARGED
296	1003800	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	EXPIRED
297	1004553	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DAMA
298	1005243	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DISCHARGED

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Date 20/4/2021

The Principal,
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Subject: **Approval of Plan of Thesis.**

This is to inform you that the Faculty of Medical Sciences in its meeting held on 22.01.2021 has approved the plan of thesis of **Dr. Harmandeep Kaur**, a student of your college for **MD Microbiology** along with the names of Supervisor/Co-Supervisor as under:-

Topic Plan of Thesis
To study clinical spectrum and characterization of infections in a medical intensive care unit.

Supervisor
Dr. Veenu Gupta
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The student has to submit the three copies of thesis (along with PDF format) , to the Controller of Examinations, BFUHS, Faridkot, at least six months before the commencement of theory examination, if he/she is otherwise eligible to take the examination. He /She must directed to attach a photocopy of this letter with the forwarding letter while submitting thesis to the University along with the letter of approval of University for change of supervisor/Co-Supervisor, change of topic,(if any).

S P Singh

Dr. S P Singh MS(Oph)
Controller of Examinations

Note :

1. ***If any discrepancy found regarding topic of thesis or Supervisor/Co-Supervisor, inform undersigned within one month after issue of this letter.***
2. *The student may submit the thesis as per the schedule already conveyed i.e for May/June examination 30th Nov of the preceding the year of examination and for Nov/Dec examinations 31st May of the year of examination.*

TO STUDY CLINICAL SPECTRUM AND CHARACTERIZATION OF INFECTIONS IN A MEDICAL INTENSIVE CARE UNIT

THESIS PROPOSAL

FOR APPROVAL OF SUBJECT OF THESIS TO BE SUBMITTED IN

PARTIAL FULFILMENT OF THE REQUIREMENTS

FOR THE DEGREE OF

MD

In

MICROBIOLOGY

OF THE

BABA FARID UNIVERSITY OF HEALTH SCIENCES

FARIDKOT

NOVEMBER, 2019

DR HARMANDEEP KAUR

DEPARTMENT OF MICROBIOLOGY
DAYANAND MEDICAL COLLEGE AND HOSPITAL
LUDHIANA

ABSTRACT OF PLAN OF THESIS

Title	To study clinical spectrum and characterization of infections in a Medical Intensive Care Unit.
For the degree of	MD (Microbiology)
Name of the candidate	Dr. Harmandeep Kaur
Supervisor	Dr. Veenu Gupta, Professor, Department of Microbiology, DMCH, Ludhiana
Co-supervisor	Dr. Rajesh Mahajan, Professor, Department of Medicine, DMCH, Ludhiana. Dr Jyoti Chaudhary, Associate Professor Department of Microbiology, DMCH, Ludhiana
Institution	Dayanand Medical College and Hospital, Ludhiana
University	Baba Farid University of Health Sciences, Faridkot

Introduction: Long term stay in ICU leads to a variety of infections that increase the morbidity & mortality in critically ill patients. In the absence of precise microbiological data, treatment is started with broad spectrum antimicrobials, without discrimination as to the likely causative microorganisms resulting in ineffective therapy & increased antimicrobial resistance.

Aim of study: 1) To study clinical profile, risk factors, outcome and characterization of infections in patients admitted in MICU.

Materials and Methods: The study will be a prospective study which will be conducted over a period of one year in the department of Microbiology DMCH, Ludhiana. All patients admitted in medical ICU will be included in study. The specimens received will be processed and antimicrobial susceptibility pattern will be determined according to standard protocol. The detailed clinical profile and risk factors will be noted to correlate the outcome. The data obtained will be statistically analyzed.

Clinical significance: With this study there will be clinical, microbiological & epidemiological benefits in finding out the pattern of infections in critically ill patients in ICU thus helping in decreasing the morbidity & mortality.

Keywords: Clinical Profile, Risk factors, Outcome, Antimicrobial Susceptibility Testing (AST)

Harmandeep Kaur — Jyoti Chaudhary — Rajesh Mahajan — Veenu Gupta — [illegible]

(Signature) Candidate | (Signature) Co-supervisor | (Signature) Co-supervisor | (Signature) Supervisor | (Signature) Principal

CERTIFICATE OF FACILITIES AVAILABLE

This is to certify that the facilities for work on the subject of thesis titled **"To study clinical spectrum and characterization of infections in a Medical Intensive Care Unit"** exist in the Department of Microbiology, DMC&H, Ludhiana and will be provided to the candidate. We will see that the data being included in the thesis is genuine and is collected by the candidate herself under our supervision and guidance.

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Date : _____

APPROVAL PROFORMA
BY
RESEARCH & ETHICAL COMMITTEE
DAYANAND MEDICAL COLLEGE & HOSPITAL, LUDHIANA

Name of candidate	Dr. Harmandeep Kaur
Department	Microbiology
Topic of Thesis	To study clinical spectrum and characterization of infections in a Medical Intensive Care Unit.
Likely date of appearing in PG examination	May 2022
Date of enrollment	6th May 2019
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Approved: Yes / ~~No~~

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Approved: Yes / No

Prof. Arvind Malhotra
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BABA FARID UNIVERSITY OF HEALTH SCIENCES, FARIDKOT

PROFORMA FOR REGISTRATION OF SUBJECT FOR DISSERTATION

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2	NAME OF THE INSTITUTE	DAYANAND MEDICAL COLLEGE AND HOSPITAL, LUDHIANA PUNJAB.
3	COURSE OF STUDY AND SUBJECT	MD MICROBIOLOGY
4	DATE OF ADMISSION OF COURSE	6 TH MAY,2019
5	TITLE OF THE TOPIC	To study clinical spectrum and characterization of infections in a Medical Intensive Care Unit.

6. BRIEF RESUME OF THE INTENDED WORK

6.1 NEED FOR STUDY

The increased morbidity and mortality associated with nosocomial infections in the ICU is a matter of serious concern today. The most common source of infections in ICU are mainly bacterial. In India Infections are more common in medical ICUs. The most common types of nosocomial infections in ICU are ventilator –associated pneumonia (VAP), central line -associated blood stream infections(CLABSI), urinary catheter related infections , skin and soft tissue infections, gastroenteritis and central nervous system infections like meningitis. . Intensive care unit acquired infections have been reported to be associated with increased length of ICU and hospital stays.[1] It leads to major burden on public health system of the country .The source of nosocomial infections are generally exogenous the source being any part of hospital ecosystem like air, objects, food , water and air. A nosocomial infection is defined as an infection that is not present or incubating when the patient is admitted to the hospital or other health care facility.[2] It has been reported that the incidence of nosocomial infections in the intensive care unit (ICU) is about 2 to 5 times higher than in the general in-patient hospital population.[3] There is high prevalence of Gram negative bacterial infections such as *Acinetobacter baumannii*, extended spectrum beta lactamase and metallo-beta- lactamase producing organisms (e.g., *Escherichia coli, Klebsiella pneumoniae*) and drug resistant Gram -positive organisms (methicillin – resistant *Staphylococcus aureus*, vancomycin - resistant *Enterococci*, and others).[4] Prevention of infection can be achieved through good antimicrobial use and infection control, including hand hygiene. Grouped, best practice activities called 'care bundles 'have been developed to prevent VAP and CLABSI. Microbiological cultures are important to rapid and accurate diagnosis, which improves outcomes and reduces resistance. The principles of treatment include early,antimicrobial therapy (after appropriate samples are taken) targeted to the local microbes.

The emerging antibiotic resistance among Gram negative bacterial pathogens in the hospital and community has been a concern for the health care providers due to the limited treatment options. These infections are an important reason for prolonged hospitalization, leading to increased treatment costs and poor patient outcome. Infections caused by multidrug-resistant (MDR) Gram-negative organisms are associated with high morbidity and mortality. Treatment options for infections caused by these pathogens are limited. By this study, antibiotic susceptibility pattern will be noted and thus will be helpful for early diagnosis and effective management of infections.

6.2 REVIEW OF LITERATURE

Nosocomial infections are a major threat to the patients' safety in any health-care facility.[5] However, the prevalence is higher in the Intensive Care Units (ICUs) than other areas of the hospital.[5] The prevention of ICU acquired infections demands knowledge of the infection rates and of the sources, the pathogens involved as well as the common risk factors for infection. The incidence of nosocomial infections varies according to the setting, that is, the type of hospital or ICU, the patient population and the precise definition and surveillance techniques used to identify a nosocomial infection.[6] A large cohort multicentric international study done by Alberti C, Brun-Buisson C, et al. has reported at least one ICU acquired infection in 18.9% of patients, with an incidence ranging from 2.3% to 49.2% across the centers.[7] In a 1-day point prevalence study done by Vincent JL, Rello J, et al. involving 1265 ICU s from 76 countries (extended prevalence of infection in intensive care [EPIC II] study), 51% patients were found to have nosocomial infection. However, the rates of infections varied considerably according to the country, with Greece and Portugal having the highest and Switzerland and Germany and the Netherlands having the lowest infection rates.[8] Other studies have reported incidence rates between 9% and 37%, depending largely on the populations studied.[9] Crude infection rates might not be representative of the overall problem since they do not take into account the patient's intrinsic risk of infection or extrinsic risks associated with exposure to medical interventions.[10] This difference in findings is not necessarily related to better quality of care, since many other factors may be responsible including difference in the criteria for patient selection, the case mix, ICU type, length of stay, rate of device utilization and discharge criteria.[11] The patients from a single institution can present with different risk of infection in the context of differing case mix, severity of illness and utilization rates of invasive devices.[12]

In the EPIC II study done by Vincent JL, Rello J, et al., the most frequently reported sites for ICU acquired infections were the lungs (64%), abdominal (19%), and blood stream (15%).[10] Data from the United States National Nosocomial infections surveillance system showed that the nosocomial pneumonia accounted for 31% of all nosocomial infections followed by urinary tract infections and blood stream infections.[12] The site distribution of nosocomial infections in this study broadly conforms to the findings of earlier and larger studies mentioned above.

The precise pattern of causative organisms, whether bacterial or fungal, varies across countries and between ICUs according to patient case mix, site of infection, antibiotic protocols, infection control practice and local ecology and resistance patterns.[13] Although recent years have seen swings in the pathogen pattern toward Gram-positive bacterial infections,[14] still, most studies report that more than half of the nosocomial infections occurring in the ICU are due to Gram-negative bacteria.[8,12] In the study conducted by Sugata Dasgupta, Soumi Das and Avijit Hazra, the most commonly isolated organisms were Gram-negative Enterobacteriaceae followed closely by Pseudomonas species. The detection of Candida species in 15% of the isolates in this study is also consistent to some extent with the studies of Pittet and Wenzel[15] and Edgeworth et al.,[16] who have reported that fungal pathogens are also becoming increasingly common among patients with nosocomial bloodstream infections.

Intensive care unit acquired infections have been reported to be associated with increased length of ICU and hospital stays.[17] In a prospective observational study conducted by Sugata Dasgupta, Soumi Das and Avijit Hazra nosocomial Pneumonia (both ventilator and non ventilator associated) was the most frequently detected infection, followed by urinary tract and central venous catheter associated blood stream infections. MDR pathogens are common among late,onset cases of VAP. Some recent reports have identified similar rates of causes in patients with

early versus late onset VAP. This may be related to the worldwide rise in MDR pathogens; it emphasizes that the local ICU ecology[18] is the most important risk factor for acquiring MDR pathogens, irrespective of the length of intubation. The challenge for the intensivist is to start an antimicrobial therapy that will be immediately effective while avoiding any overuse of extended-spectrum antimicrobials. New rapid diagnostictests have been developed but their performances for VAP diagnosis remain to be evaluated.[19]

Correa and Pittet reported an additional cost of about $3.5 billion/year due to ICU acquired infections.[20] The findings in the present study are corroborative. Crude mortality rates associated with nosocomial infection vary from 12% to 80%, dependent on the population studied and the definitions used[17] Whereas some studies do report increased mortality associated with nosocomial infections,[21] other studies, like those of Rello *et al.*,[22] have not shown higher mortality, emphasizing the problems in defining cause-effect relationship in these individuals. In the study by Rosenthal *et al.*,[23] crude mortality rate for patients with device associated infections ranged from 35.2% (for central venous catheter associated blood stream infection) to 44.9% (for VAP).A probable explanation for the lack of difference could be a variation in the baseline severity of illness mentioned before and described by Vincent.[13]

Although there is a plethora of studies detailing the risk factors for various type of nosocomial infections in various groups of patients, more commonly identified risk factors can be divided into four groups: (a) Those related to underlying health impairment; (b) those related to the acute disease process; (c) those related to use of invasive procedures and (d) those related to other treatment modalities. Diverse studies have described various features of underlying health impairment, like chronic lung disease,[24] immunocompromise, increased age,[9] malnutrition, etc., as independent risk factors for nosocomial infections. It has been reported

in some studies[11,25] that the risk of developing nosocomial infections increased with high APACHE II score.

It has been reported in studies that mortality associated with multiple organism bacteremia is 48% as against 25% in single organism bacteremia. In a study, age, simplified acute physiology score II score at onset of blood stream infection, colistin resistance, and aminoglycoside were identified as independent predictors of *K. pneumoniae* infection in the ICU.[26] Another study conducted in surgical ICU found admission APACHE II score, presence of peritonitis, pancreatitis, aminoglycoside use, and mechanical ventilation as independent risk factors for nosocomial infection.[27] A retrospective cohort study conducted by McCusker ME, Perisse AR in a mixed ICU found the need for mechanical ventilation on ICU day 1 and transfer to the ICU from another unit as independent predictors of ICU-attributable nosocomial infections.[28] No study has, however, shown the direct association between a particular organism and a particular infection site on mortality.

This study was planned for early diagnosis and effective management of infections and to study the risk factors and their outcome.

6.3 AIMS OF THE STUDY

1) To study clinical profile, risk factors, outcome, characterization of infections in patients admitted in MICU.

7. MATERIALS AND METHODS

The present study is prospective study which will be conducted in the department of Microbiology, DMCH Ludhiana over a period of one year.

SAMPLE COLLECTION-

- Blood sample – Under all aseptic conditions, 10-20 ml of blood will be withdrawn from antecubital vein with a disposable syringe and will be inoculated directly into commercially prepared BACTEC 9240 or BacT/Alert culture bottles.
- Body fluids-Under all aseptic conditions body fluid samples will be collected in sterile universal container.
- CSF sample will be collected aseptically by lumbar puncture into sterile glass vials.
- ET secretions sample- It will be collected by introducing a catheter through the larynx into the trachea. If an endotracheal tube is in place or tracheostomy has been done, the tracheal secretions will be aspirated in a sterile screw capped container.
- BAL sample-It will be collected by injecting 30 to 50 ml of physiologic saline through a fibroptic bronchoscope. The saline will be aspirated & sent for smear preparation and culture.
- Urine -Under all aseptic conditions urine samples from catheterized patients will be collected with a disposable syringe from the urine port.
- Pus/ Wound swab/Tissue - Under all aseptic conditions these samples will be collected in sterile universal container.
- SAMPLE PROCESSING- The sample received in Microbiology lab will be processed as per standard protocol.

DIRECT EXAMINATION-

- Gram staining will be performed directly from the sample.
- KOH mount- 10-20% KOH will be used for identification of fungal elements.
- For CSF samples-wet mount preparation, ,India ink preparation, bacterial antigen and Cryptococcal antigen will be done.

- ZN staining – smear will be prepared for detection of acid fast bacilli.
- CULTURE-
- Blood and body fluid specimens will be processed in the BACTEC 9240 or BacT/Alert microbial detection system. Blood culture bottles will be loaded in the instrument and incubated for a maximum period of 7 days or bottle indicate positive by the system and time to positivity will be noted. Smears will be prepared from positive blood culture bottles and Gram staining will be done. The positive bottles will be subcultured on blood agar and MacConkeys agar plates.
- Urine, respiratory samples, pus , wound swabs etc will be cultured on blood and MacConkeys agar and incubated at 37°C for 24-48 hrs.

- IDENTIFICATION AND AST(ANTIBIOTIC SUSCEPTIBILITY TESTING) -Identification and AST(antibiotic sensitivity testing) of the isolates will be done by Vitek 2 system.

MYCOBACTERIAL CULTURE- After decontamination/ centrifugation/ homogenization, sample will be cultured on LJ medium for 8 weeks .Growth obtained will be used to make ZN smear to confirm acid fast bacilli.

FUNGAL CULTURE- Samples will be cultured on 2 sets of Sabourauds dextrose agar (with and without cycloheximide) and incubated at 25°C and 37° C for 21 days. Identification of the isolates will done by Gram staining, germ tube testing and lactophenol cotton blue mount.

Infections will be categorized into Respiratory, Urinary, Blood stream, Abdominal, soft tissue infections etc and infection rate will be calculated depending upon the number of patients who developed infection.

Depending upon the number of days of indwelling devices, device associated infection rate (VAP, CLABSI, CAUTI) will be calculated.

7.1 SOURCE OF DATA

On the basis of clinical evidence of infection, various specimens like respiratory samples (Endotracheal secretions and bronchoalveolar

lavage), blood and body fluids, CSF, urine, pus and wound swabs etc will be collected. The samples will be processed according to standard protocol. Identification and antimicrobial susceptibility of isolates will be done by Vitek 2 system.

7.2 METHOD OF COLLECTION OF DATA

The present study is prospective study which will be conducted in the department of Microbiology, DMCH Ludhiana over a period of one year from 1st Jan 2020 to 31st Dec 2020. Patient details which includes name, age, sex, MRD number, date of admission, risk factors (old age/comorbities/malnutrition and immunocompromised state/reintubation etc), date of insertion/removal/duration of indwelling devices, , reason for ICU admission, Apache- 2 score, source of admission, empirical antibiotics, general investigations, provisional diagnosis and outcome will be recorded in a preformed proforma will be noted.

Inclusion Criteria:

All patients admitted in medical ICU will be included in the study.

Exclusion Criteria

Patients admitted in other ICUs

Duration of Study:

The present study is prospective study which will be conducted in the department of Microbiology, DMCH Ludhiana over a period of one year from 1st Jan 2020 to 31st Dec 2020.

Outcome:

This study will show that there are clinical, microbiological & epidemiological benefits in finding out the pattern of infections in critically ill patients in MICU thus helping in decreasing the morbidity & mortality.

Statistical analysis:

Data will be described in terms of range; mean ±standard deviation (± SD), frequencies (number of cases) and relative frequencies (percentages) as appropriate. All statistical calculations will be done using

SPSS (Statistical Package for the Social Science) SPSS 21 version statistical program for Microsoft Windows.

7.3 DOES THE STUDY REQUIRE ANY INVESTIGATIONS OR INTERVENTIONS TO BE CONDUCTED ON PATIENTS OR OTHER HUMANS OR ANIMALS? IF SO, PLEASE DESCRIBE BRIEFLY.

Not Applicable

7.4 HAS ETHICAL CLEARANCE BEEN OBTAINED FROM YOUR INSTITUTION IN CASE OF 7.3?

Attached Herewith

8. LIST OF REFERENCES

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PROFORMA

Sr. No

Name:

Age/Sex: Date of admission:

MRD No: Area:

Admission No:

Admission -Direct / ward/Referral from other hospitals

Reason for ICU admission

Chief complaints: Provisional Diagnosis:

Risk factors:

Comorbidities:

Treatment history:

APACHE-2 Score:

Date & indication of Indwelling devices

Device days:

Investigations:

Candidate Signature **Supervisor Signature**

Radiological evaluation:

Direct Examination:

Gram staining

Wet mount

India ink/bacterial antigen/Cryptococcal antigen -

KOH mount

ZN staining

CULTURE- (Identification & AST)

Final diagnosis

Outcome:

Candidate Signature **Supervisor Signature**